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Personal

Mr. A. W. Fairley, managing director of the Shepparton Fruit Preserving Co. Ltd., has been appointed a member of the State Electricity Commission.

Mr. A. H. Harris, who has been connected for many years with F. J. Simon & Co., fruit merchants, City Markets, Sydney, died on February 11.

Hon. W. H. Calvert, M.L.C., and Mr. J. P. Piggott (Port Huon Fruitgrowers' Co-op.) were in Melbourne at the end of February, where they took up questions relative to the fruit shipping programme. It was pleasing to note that Mr. Piggott, who suffered bad health until a couple of years ago, is now remarkably well, his renewed health being due to subsistence on a fruit diet.

Mr. Everard Ross, a director of H. Jones & Co. Ltd., will be remaining in London, and will observe the marketing of Australian Apples this season.

EDITORIAL

Cultural and Marketing Research

Good Work Now Commenced Should be Continued.

ONE VERY PLEASING effect of the recent Commonwealth Grant of £20,000 for research into Apple and Pear cultural problems has been the establishment of closer touch between the Science Officers of the Departments of Agriculture and the growers.

Reports are published in this issue of the field work conducted in Victoria by the Dept. of Agriculture. There can be no mistake as to the appreciation of the producers. Here indeed was practical demonstration work on test plots throughout the State. A definite programme, based on the widest experience for spraying to control black spot and codlin moth was put into operation by trained scientists. These test plots have proved the value of the spraying programme as laid down.

Further, where growers generally adopted the same programme in their orchards, equally good results were achieved.

For a long time past, growers through their organisations have been agitating for scientific work of this character, but shortage of money by Governments was given as the reason why this work could not be done.

This field demonstration work, linking up the scientific and the practical, has long been adopted in the United States to the great benefit of producers. And here a tribute should be paid to the late Walter Hines Page, who, before he became American Ambassador in London (performing services of untold value to humanity during the Great War) had inaugurated this system of conveying the experiences of research workers direct to producers in their orchards and farms.

This system needs to be developed in Australia. It is an urgent matter. Nothing else can take its place.

Now that the work has been commenced, even in a modest way it should on no account be allowed to cease. The grant of £20,000 was given for one year only. But the work is only commencing. At least a five-year programme should be laid down —from which national benefits would accrue.

:: :: ::

The Council for Scientific and Industrial Research, and the several State Departments of Agriculture are to be warmly commended for their efficient administration of this initial grant.

We need not here go into the question as to the fund from which this £20,000 grant was obtained. Suffice it to say that very many growers regretted that this sum was deducted from an expected grant of £100,000 in lieu of freight reduction. Shipping companies, however, do not hesitate to remind producers, when freight reduction is requested, that this sum of £100,000 was due to them in reduction of Governmental charges, but passed on to fruitgrowers direct by way of grant.

This question of a grant in lieu of freight reduction is still a very live one. Certainly relief in the way of freight reduction is a truly important item.

:: :: ::

Facing up to facts as they are, the grant of £20,000 has been wisely expended, and the way is clearly pointed for continuity in this connection.

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Coupled with these vital matters of cultural research and the production of larger and better crops at reduced costs are the equally important ones of marketing research and the method of disposing of these ever increasing quantities of fruit, particularly Apples, which are now coming forward.

Hence the wisdom of the delegates who attend the conferences of the Australian Apple and Pear Export Council in authorising that representative and successful organisation to give the required leadership in regard to a publicity campaign to increase the Australian consumption of Apples.

The nutrition committees here and abroad, who have been studying the diet of the average people have definitely reported on the need for an increase in the consumption of fruit. This is good news for the fruit producer, but the work of telling the story to the public remains to be done. The Apple and Pear Council, at the request of the growers is negotiating with the Government as to the method of raising the finance, and there is a widespread desire among producers, in view of the heavy stocks of Apples retained in Australia this season for the proposed publicity enterprise to be commenced at the earliest moment.

Letters to the Editor

IS CONTROL LEGISLATION BENEFICIAL?

(The Editor, "Fruit World.")

Sir,—Mr. Muir appears to have evaded the issue in my letter published in January "Fruit World." My contention is that no Board knows your business as well as you do yourself. Surely any keen farmer makes himself conversant with the marketing conditions applying to his produce. You may as well suggest that a man earns his wages, but some Board should be set up to say in what manner he should spend them. If Mr. Muir feels that he is not capable of handling his product to his best advantage, then by all means employ an expert for the job; but why penalise the efficient marketer because of another's failure.

With regard to the prosperity of the dried fruits grower, on the statement of Mr. Slater, M.L.A., the average income of these men is £150 p.a. Does Mr. Muir consider under the basic wage a good income? Surely it would not be much worse without the Board. I feel glad to think the employees obtain the basic wage. It certainly appears more than the grower receives, even though his capital and management are put into the venture, as well as his labour.

I would like to think that the dried fruits industry was beneficial to Australia, but we cannot say any business is advantageous which has to receive assistance to keep same afloat.

I agree with Mr. Muir that bounties are wrong. If he will refer back to my letter he will note that I am far from satisfied with conditions as they are; but in my opinion so-called orderly marketing is not the solution.

Evidently Mr. Muir does not wish to comment on my reference to the huge burden of taxation borne by the Australian people; also the exorbitant tariff adversely affecting the primary producer.

I would advise Mr. Muir to get down to causes, and not tinker with effects, also not to advocate to Australians a form of nationalisation which has been followed by a certain country in Europe with orders to tighten in the belt and put bullets before butter.—Yours, etc.,

R. SERPELL.

Doncaster, Vic., 20/2/37.

THE N.Z. CITRUS EMBARGO.

Views of N.Z. Fruitgrowers' Federation.

(The Editor, "The Fruit World and Market Grower.").

Sir,—The attention of my directors has been drawn to an article over the signature of P. S. Macdermott in the November issue of your journal, with reference to the fruit embargo.

In referring to the attitude of New Zealand fruitgrowers, Mr. Macdermott states "The attitude of the fruitgrowers in New Zealand is most favourable and no objection would be raised by the Federation, to the lifting of the embargo."

I have been directed to advise you that the question of the fruit embargo has never been officially discussed by my directors and the New South Wales Representatives who toured this country. It is understood, however, that meetings were held in the Auckland and North Auckland Provinces, when the New South Wales representatives placed their views before the citrus growers.

At the last meeting of my Board the following resolution was passed, and forwarded to the Acting Minister of Customs.

"That our attention has been drawn to the fact that fruit is being imported from Australia, and although we realise the reason for this, namely, the shipping trouble on the Pacific Coast, it is hoped that no general let up of the embargo on Oranges and other fruits, will be agreed to."

We trust you will afford us the courtesy of publishing this letter in your next issue.—Yours faithfully,
New Zealand Fruitgrowers' Federation tion Ltd.,

A. OSBORNE,
General Manager.

Wellingon, N.Z., 19/2/37.

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(Prepared Pale Oil)
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Ask our local agent for a copy of our hand-book, "Clean Fruit" which gives a wealth of information on all spraying matters.

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NEWS IN BRIEF.

With their heavy Codlin infestation, U.S.A. Pacific Coast Apple growers need washing machines for removal of spray residue. In British Columbia, Canada, where the infestation is much less severe, dry wiping by machinery is satisfactory.

The stationary spray plant on Mr. F. Pyke's property at Ringwood (Vic.), is efficiently operating. This is one of the "model" orchards in Victoria. A brief description of the property appears in this issue.

The count system of packing Apples is entirely carried out in the U.S.A. Pacific Coast boxed Apple trade.

The Quantong (Vic.) fruitgrowing district is described in this issue. The manager of the local organisation, Mr. C. H. Jost, is highly esteemed for his ability and energy.

At a recent Field Day at the E. Malling (Eng.) Research Station, the various types of rootstocks for Apples, Plums and Pears were inspected. Stocks were noted with different characteristics for specific varieties and varying classes of soil.

During the past five years, in the State of Washington, U.S.A., 10,000 acres of once profitable Apple orchards have been grubbed out.

Scientists in U.S.A., are earnestly seeking for a substitute for lead arsenate to control the codlin moth. So far the oil-nicotine treatment is the most promising.

Australian canning fruit growers are vigorously pressing for a revision of the Ottawa Agreement to secure more effective preference in the U.K. market.

Mr. P. H. Thomas reports that the majority of American Apple packing houses visited were voluntarily packing above the required standard, growers and all interested realising there was no place in the market for inferior or badly packed fruit.

U.S.A. Apple growers are now extensively advertising Apples. This has been necessary because of the successful advertising of other fruits in U.S.A.

Shy bearing Pears have been brought into heavy cropping by using the "Quince C" stock as recommended by the E. Malling (Eng.) Research Station.

There is increased interest in Passionfruit production around Lismore, N.S.W., and heavy marketing is forecast in a year or two.

(Continued on page 26)

Victorian News and Notes

QUANTONG: A Progressive Fruit District

A Review of Its History and Development.

(By Our Travelling Representative.)

QUANTONG, a progressive fruit-growing district situated 215 miles N.W.W. from Melbourne d ten miles west from Horsham, is obably unique in the annals of Vic-ria, in its varied productiveness, d its system of distribution of the ops.

About 45 years ago, half a dozen uples, some with small families and with very small capital, settled re on small blocks of land (from 2 acres) with a hope of water be-g supplied by channel from War-ok, in the Grampians. This was complished a year afterwards, and ace that time Quantong has never oked back, although there have been any trying times, which is common all land settlers, but the spirit of termination of the pioneer always evailed.

This "oasis," situated in the centre the well-known Wimmera district, en termed the "Queen of Wheat nds," has attracted even the sons om these highly productive cereal rms, and at present these orchards e almost impossible to purchase.

One of the chief factors is the buy-g and selling facilities established the "Quantong Fruitgrowers' As-ciation," whose manager is Mr. C. Jost—Mr. Jost came to Quantong en quite a boy, making a 14-days p per dray from S.E. Victoria, en the settlement was in its in-ncy—and from that time until the esent day, Quantong has always imed a leader of super energy and terprise.

In the early days, each grower dis-sed of his products as he thought st, some hawking around the towns d farms, others trying to sell in orsham, while most consigned to elbourne agents, and as the latter an necessitated picking the fruit in very green state, prices returned to e grower averaged out very low.

About 26 years ago, C. H. Jost tablished a buying and distributing siness of his own, supplying shops 100 miles around with the pro-cts of the place and acting as a anufacturers' agent for supplies of chard requisites.

A few years later the growers alising the benefits of this direct siness and the gain in co-operation d prompted by Mr. Jost, who had zed the trail, formed the present sociation, which is absolutely uni-e in its operation in Victoria, by pplying all orchard requisites and ling all products, viz.: from a Cu-cumber to a 1,000 ton order, the Cucumber buyer and seller receiving the same courtesy and prompt despatch as the big man.

. A. E. Lane, an old Quantong iden-y, in his eightieth year—he is still e to shear a sheep. With him is daughter and her Kirkcaldy spin-g wheel. Orchard in the back-ground.

The writer has seen the manager, soliciting, receiving and booking orders at midnight per 'phone, this helps the retailer, as he knows his requirements better late in the evening, and again in the morning at 5 a.m., ringing up growers, all of whom are connected by direct 'phone service with the office. He (Mr. Jost), who resides at the office of the Association on the railway station, has a special device connected by 'phone, which wakes him up (if asleep) between midnight and 5 a.m. if anyone needs his attention.

The growers and staff revere their manager, although he gives them not a minute rest or peace, but on the other hand their cheques are always ready and accounts in Apple-pie order.

Mr. Stan. Jost, who is sub-manager and accountant, and has had banking experience, ably supports the chief.

Associated with the Messrs. Jost are Messrs. W. Keyte, Greenborg and Becker, the Stationmaster, Mr. O'Brady renders helpful service.

The turnover of this selling Association exceeds £31,000 per annum, and is yearly increasing, and the weekly despatch per rail is usually over 10,000 packages and sometimes much higher. The Association has recently booked an order of 600 tons for Tomatoes and a heavy booking for canning Pears—both these lines make an exceptionally good sample.

As stated in the beginning of this article, the settlers started in a very humble way, but as time went on, the original properties were added to and altered, until the holdings are from 20-200 acres in extent, growing all varieties of stone fruits, Pears, Apples, Grapes, Currants, Sultanas, Tomatoes, Beans, Peas, Pumpkins, Cucumbers etc. All holdings have their own cows, pigs, and fowls. Others in addition to fruit culture are engaged in dairying and have established quality herds of milkers; wheat and oats and grown for hay with maize and lucerne, the latter is to a great extent kept for hay for Winter feed.

The horse reigns supreme for cultivation purposes and motor for road service. When war broke out in 1914 it was not long before all the eligible men enlisted in the A.I.F., some of these paid the supreme price, others were permanently injured, but whilst away the old men, women and children kept "The home fires burning" for the boys to return to.

These returned men have gained a wider outlook and are broadminded citizens with disciplined minds and methods. Near the centre of the original settlement are two churches, public hall—State School, and grounds, teacher's residence, football, cricket and tennis grounds.

East Quantong 45 years ago was Crown land and looked upon as useless by most localities, but Mr. C. H. Jost had quite a different idea. Taking up a large tract of this, he fenced it, planted 100 acres of trees and vines and built a home and extensive packing house and stores, also experimenting with crops and fodder grasses on various soils, proving to the farmer and settlers around that this country under proper treatment could be made productive. These lands at present are supporting a number of families in comfort—more fruit and Tomatoes of the finest quality are grown on these properties (which were at one time the despised areas) than on the original holdings. again demonstrating what one enterprising pioneer can do to lead others on the road to prosperity.

Among the improvements which are desired are better drainage facilities: probably more nitrogenous cover crops with manure will be used for ploughing in, while the codlin moth is the major pest to contend with. Quantong has practically little black spot.

Some five miles to the east of original Quantong is **Mr. Lindner's** well-kept orchard of mixed fruits; here system and cleanliness are very prominent; unfortunately when the writer called he could not find Mr. Lindner.

A mile further west is **Mr. E. S. Lemm**, who has a superior herd of milkers and grows ample fodder and thus keeps up the milk supply. He also grows 8 acres of mixed fruits. Mr. and Mrs. Lemm were packing these products under a shed with a thatched roof, which makes for coolness in Summer and snugness in Winter.

Opposite is **Geo. Bandels**, whose father (now deceased) planted vines and trees here 50 years ago. This is a large property and planting could be extended to make a very fine orchard.

Crossing the channel, **Mr. Gersch** and family were visited, and this is where the writer heard and saw that which pleased and interested him very much. The whole family have a special aptitude and fondness for orcharding, and although 27 acres is the orchard extent, many thousands of cases of A1 quality fruit are harvested and exported. One of Mr. Gersch's sons is the head packer, who has the reputation of being the district champion, but all the family help harmoniously.

The principal fruits grown are:—Apples: Cleos, Rome Beauty, Grannie Smith, Jonathan; Pears: W.B.C., and Packhams; also Prunes and Apricots. The Jonathans were of "Extra fancy" color and quality, with very little waste through coddlers and mis-shapes, just showing that fruit growing is not a fluke or mystery, but a science applied intelligently.

In addition to packing and grading house, Mr. Gersch has a well-equipped workshop, fitted with saw, lathe, drill, emery wheels, etc., all driven by a petrol engine which also drives the pump to fill an elevated tank from which the lawn and gardens can be sprinkled and house supplied as in the suburbs.

Any damaged fruits are fed to pigs, and each day cleared up, the manure from the pigs and cows, supplemented with other lines and carted to the orchard, all make for robust and healthy tree growth. Adjoining on the west of Gersch's is the property of **Mr. Zierseh**, of 47 acres—14 are of mixed fruits and a large plot of Tomatoes; this place shows expert management and care. The lands originally taken up by Harry Hunt are now cultivated by **Mr. Dumesney**. There is a heavy crop of Zante Currants here, and if weather keeps fine a profitable harvest will be gathered.

Mr. F. R. Dymke, who purchased Mr. Josts' property some years ago, situated about the centre of East Quantong, grows 84 acres of mixed fruits, here the Cleo. Apple and W.B.C. Pear excel—about 13 acres of Peaches and Zante Currants are just coming into bearing. This property would divide into three, allotting a good mixed orchard of about 30 acres to each, having frontages to two roads.

Quantong as a whole is progressive, and has become a solid buying and selling association under the manager-

A view of a section of the orchard of Mr. Harry Overall, Quantong, Vic.. with him on the right is Mr. C. H. Jost.

ship of Mr. Jost, but apart from these factors the grower must do his part, and many of them are so doing. One man, **Mr. H. Overall**, who has built a fine residence right in the heart of the place, is particularly "go ahead" by branching out into new ventures, purchasing new lands and planting them, and has now acquired nearly 200 acres of irrigable property, specialising in Prunes and Apricots for drying. These will be processed on the place, and to this end he has erected a suitable building of capacious dimensions.

The building is equipped with ample lighting, cement floors, trolly lines for trucks, effective drainage and is adjacent to the drying yards, which are so arranged that little or no dust will get on the fruit. The trays are all standardised, and can be packed up, one on the other, and conveyed to the building quickly should necessity arise. In addition to fruit growing, Mr. Overall cultivates Tomatoes and Pumpkins, some years growing many acres, and should a glut of Pumpkins occur, they are stored and fed to cows and pigs, of which he keeps Ayrshires and Yorkshires. These are all provided with substantial cool houses in Summer time and cosy quarters in Winter.

Ample lucerne crops are grown; sufficient is made into hay, thus providing food for the Winter months, as well as Summer, for horses and cows. All the cultivation is done by horses. Each morning, cow, horse, and pig manure is put in a heap, thus retaining fertilising values, and carted out when required on to the lucerne paddocks and orchards. Other manures are used, B. and B. being the most favored.

Fred Eltze, who a few years ago was working with his father on a very small place, is now one of the large growers of fruit, having taken up land in East Quantong, fencing and planting several places, and building a substantial homestead and rearing a family of boys and girls, who are a credit to their parents. Here are to be seen varieties of fruits and Grapes. The writer saw Satsuma Plums 2½ in. diameter, Burbanks of like size, Peaches 3½ in. and some splendid Cleos.

Mr. Eltze is an advocate for cover crops with manure and cultivation, and results prove this method to be good.

Trailing all over his front verandah is a hop plant, showing magnificent growth with a profusion of flowers, these are processed and used at home. This shows that hops can be satisfactorily grown even at Quantong.

Mr. H. Hughes, who originally was the nearest grower to the Railway Station, has extended his holdings further towards the railway, grows varieties of fruits every successfully.

This closeness to the station was a great boon in the early days, as the roads were then unsatisfactory, but now roads are comparatively good, and motor transport quick, so a mile or two makes little difference; nevertheless, position is still important.

An Outstanding Ringwood (Vic.) Apple Orchard

Feeding the Soil Fertilisation :: Central Spraying

Mr. Frank Pyke's Property.

(By Our Travelling Representative.)

ANYONE INTERESTED at all in orchards and scenery, cannot fail to notice, when travelling by rail or road to Ringwood from the city, a mass of dark green foliage in the valley on the right, just before reaching that town.

On enquiry the tourist will learn that this is the 30-acre Apple orchard belonging to Mr. F. Pyke, and being enthusiastic will be impressed with the superlative condition of the trees and crop.

Every tree has been perfectly designed, and it is wonderful to note the uniformity of growth and shape.

The varieties grown are **Jonathan** and **Yates**, interplanted for pollinisation purposes, in addition a sympathetic fertiliser has been grafted to each tree, thus ensuring prolific fertility during the setting period of the fruit.

To prevent broken limbs and to make cultivation practicable, a pole (not sapling) has been placed perfectly upright in the centre of each tree, having wire supports, with rubber ends to each main limb, keeping these limbs at an agle of 45 degrees to the trunk, whether carrying a heavy crop or otherwise, and so the trees remain well balanced at all times. Without this practise trees become misshapen and unbalanced.

The Yates are so pruned to carry the fruit on the main wood and the Jonathans (of course) on shortened back laterals.

Systematic thinning of spurs and fruit is practised, consequently, all fruit is grown to best market sizes.

Nature has done much to make this orchard a show place, having two nice slopes, from Heatherdale-road at the front and New-street at back, to a creek or depression in the centre, this makes for good drainage, **the whole being pipe drained.** At each end of the orchard is an enormous dam, with extensive watersheds to fill them: these reservoirs, supplemented by the Yan Yean (if necessary) serve for irrigation purposes.

Stationary Spray Plant.

Right in the centre is the power spraying plant and mixing equipment, from here the various sprays are forced along pipes carried overhead, supported by the same poles as the trees, and are along every ninth row, hoses can be attached at will to taps spaced at suitable intervals, thus it will be seen that limbs and pipes are all out of the way. This centralised spraying scheme permits of work being done when the land is too soft to carry horses or machines, as it often is in these southern orchards.

Mr. Pyke says two less horses are now required.

The cool store has recently been enlarged to hold 24,000 cases under the direct expansion system. Nearby is the up-to-date grading and packing house.

Orchardists who have seen Mr. Pyke's place are so impressed that wherever possible the same systems of cultivation, pruning, supports, and manuring are being adopted.

The old adage that "Imitation is the sincerest form of flattery," is here exemplified. Contracts for stable and poultry manures have been entered into. The manure is ploughed in when cover crops are sown in the Autumn, and when Spring comes along, these nitrogenous plants are turned under, thus keeping the soil full of all the feeding properties needed for growing healthy trees and crops.

Fruit Growing in the Goulburn Valley (Vic.)

WRITING under date January 28, 1937, Mr. S. Towers, a well-known fruitgrower of Mooroopna, Victoria, forwards the following interesting items. The fruits grown in the Goulburn Valley are many and varied. Varieties grown for market and canning are as follow:—

Fresh Fruits for Local and Export Markets.

Apricots: Early Newcastle and Oullin's. For late varieties see Canning.

Peaches: Early White Dessert, Mayflower, High's Early, Brigg's Red May, Alexander's Early, Hale's Early, Zerbe's Early, Smith's Seedling, Louis Grognet, Elberta, White Clings, Late Reds, Don Juan and Salway.

Nectarines: Early Rivers, Goldmine, New Boy.

Oranges: Navels, Valencia, Mediterranean Sweet.

Grapes: Waltham Cross, Purple Cornichon, Red Malaga, Red Champion, Raisin De Dames, Black Prince, Ohanez, and Wine Grapes.

Fresh Fruit for Export.

Pears: Packhams', Josephine, Beurre Bosc, Winter Cole.

Apples: Granny Smith, Jonathan, London Pippin, Rome Beauty, Cleopatra.

Canning Fruits.

Apricots: Moorpark, Blemheim, Tilton, Trevatt, Campbellfield Seedling, Mansfield Seedling. The varieties Blenheim, Tilton and Trevatt are favorites.

Pears: For canning, Williams' Bon Chretien.

Peaches—for Canning: Levis Cling, Pelora Cling, Peak's Cling, Sims Cling, Phillip's Cling, Golden Queen Cling, Pullar's Cling, Thiele's Cling, Healsville Cling, Nicholls Cling (not favored by canners).

Others—Jam Fruits.—Figs: White Genoa, Black Figs, Blue Smyrna. **Plums:** All popular varieties. **Quinces.** **Prunes:** D'Agen, Robe De Sargeant, Sugar; Seville Oranges.

PLANTING AN ORCHARD IN THE GOULBURN VALLEY.

In reply to an enquiry: "What would you plant if you were planting fifty acres of new orchard in the Goulburn Valley?" Mr. Towers makes the following suggestions. I would plant for canning purposes only:—

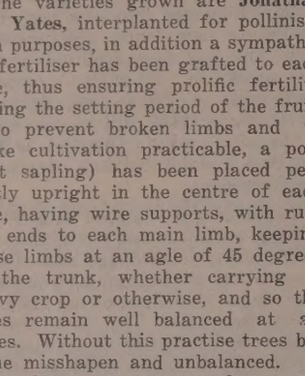
10 acres W.B. Pears.
5 acres Sims' Cling.
5 acres Phillip's Cling.
10 acres Golden Queen Cling.
15 acres Pullar's Cling.
5 acres Thiele's Cling.

50 acres.

Other growers may have different opinions as to what to plant and what would be suitable for the Goulburn Valley. It is understood, of course, that what may be suitable for this district, which is primarily canning fruits, may be totally unsuitable for other districts.

NEW REGISTRATION.

B.P.B. & Co. (Charles D. Connell and Fredk. E. Howard), City Fruit Markets, Quay-street, Sydney, fruit and vegetable merchants, etc. On 1/1/37, Fredk. E. Howard retired. Reg. 15/1/37.



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Lister BRITISH BUILT

CRUDE OIL ENGINES
Cut 70% off Fuel Cost

1. **Fuel for 3-h.p. costs 1½d. per hour. 5-h.p. costs 2½d., 7 h.p. 2¾d., and up to 38-h.p. as marvellously low. Compare with your costs. It might pay to sell or scrap your present power unit and get a Lister.**
2. **Starts instantly. A swing of the flywheel and she's off—from dead cold, too!**
3. **No starting gadgets—no magneto, no spark plugs, no carburettor—just nothing to give trouble.**
4. **Absolutely reliable, steady power—suitable for driving anything anywhere.**
5. **Lister Diesels are EXTRAORDINARY—they are really wonderful engines. With an engine of poor design and cheap make, the cost for repairs and wasted time will soon bring the price far above a trouble-free, long-lasting Lister.**

Prof. Huckle, Massachussets Institute of Technology, U.S.A., says he considers the Lister the most important and most successful development in small Diesels.

We can show you great savings on your cost to store fruit. **Ask for Information.**
Please Mention This Advertisement.

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Spraying Oils

(Red - - White - - Pale)

30 Years ago . . .

the Vacuum Oil Company pioneered the use of refined petroleum oils for the control of orchard insect pests in this part of the world, and ever since, have conducted field and laboratory tests and trials, to improve, not only the oils themselves, but also the technique associated with the efficient use of these products.

A vast wealth of knowledge has been accumulated concerning orchard insect pests, their control, habits and eradication. We suggest that if you are confronted with any individual problem that you communicate with our nearest branch office. Our wide experience is freely at your disposal.

VACUUM OIL COMPANY PTY. LTD.

VICTORIA — (Contd.)

The Pakenham Upper District

Choice Highly Colored Apples are Grown.

PAKENHAM UPPER is a fertile district, 40 miles from Melbourne, and situated midway between Pakenham and Gembrook. The district is one of great charm, there being extensive scenic views in every direction.

Fruitgrowing is the principal industry, mainly Apples are produced: Passionfruit is also grown (on the patches of chocolate soil). There are also several dairy farms on the chocolate soil.

Highly colored firm textured Apples are grown in this hilly region. The principal varieties are Jonathan, Yates, Rokewood, Statesman, Delicious and Granny Smith. There are about 35 individual orchards totalling some 1,000 acres of bearing trees. Included among these is one on "Goronga," which has been the country residence of the present Lieut.-Governor Sir Frederick Mann, for many years.

Owing to the reliable rainfall of over 35 inches annually, it has been found unnecessary so far, to provide for irrigation, in fact, for the past six years, the average annual rainfall has been 45 inches.

The local organisations include the Pakenham Upper Fruitgrowers' and Progress Association, the President of which is Mr. D. C. Black, Vice-President, Mr. A. Smart, and the Secretary, Mr. W. H. Carne.

Pakenham Upper possesses its public hall, tennis courts, cricket ground and church.

The Pakenham Upper State School is probably unique in the State for its collection of shields and prize cards for efficient Apple packing. A remark was jocularly made that the school would soon need to be enlarged to house these interesting records of the enterprise and success of the district school children.

The shield presented by the Victorian Fruit Exports' Handling Committee has been won four times by Pakenham Upper. The closest approach is Harcourt North, with three wins, and the shield has at various times been in other districts. Where will the shield rest finally? There are two more years of competition to go. Pakenham Upper School believes it will finally hold the shield.

This school is the permanent holder of one Gerrard Shield and the temporary holder of another shield from this company. The school also holds the shield for the sports competition in the Pakenham district. As for prize cards from the Royal Agricultural Society for district pack and individual merit—these are displayed in great profusion, all neatly framed by courtesy of Mr. I. Woolf.

Mr. W. H. Black and other district growers take a keen interest in the welfare of the children, giving the needed encouragement which has brought such fine results. The headmaster is Mr. S. R. Jobling.

Inspecting a Howard Rotary Hoe at the recent Pakenham Upper (Vic.) Field Day.

The Valley View Orchard, Pakenham Upper.

175 Acres of Apples and Only Five Varieties.

AT THE PAKENHAM UPPER Field Day on February 3, great interest was shown by visiting growers in the Government demonstration plots on the 175 acre orchard of Mr. I. Woolf, Valley View, Pakenham Upper.

The excellent condition of this large orchard created favorable attention; Apples are specialised. The only varieties grown are Yates, Jonathan, Rokewood, Delicious and Granny Smith.

The manurial programme consists of the following:—A green crop of oats is sown during the first week of April, for ploughing under in Spring. A dressing of sulphate ammonia, two cwt. per acre is given in July to increase the growth of the cover crop. Then during the first and second week of August a complete manure (2:2:1) is used at the rate of 5 cwt. per acre.

An excellent crop of clean fruit is showing this season. The orchard is a model of clean and effective cultivation.

The general spraying programme is as follows:—At green tip stage — bluestone 6-4-50 and ½ gallon pale oil. At 10 per cent. blossom—wet solution lime sulphur 3-80—followed by first and second lead sprays, and if necessary in the lead spray, dry lime sulphur according to the weather. Special emphasis is laid on the point **"according to the weather,"** because one day in Spring may be 80 deg. to 90 deg. Fahr., and the next as low as 60 deg., so this point has to be kept well in mind.

On this orchard, the manager, Mr. A. Apted, advises that his codlin moth control method is four lead sprayings and one or two oil applications. No calyx spray is given. The arsenate of lead which is used arrives in powder form, as distinct from lead arsenate in paste form.

Excellent results in black spot control were obtained on a trial block by using "dry" lime sulphur after the first bluestone spray. This "dry" lime sulphur comes forward in powder form and is mixed with water immediately before spraying.

The Cool Store.

The cool store on this orchard has a present capacity of 18,000 cases. Extensions are now being made which will increase the capacity to 23,000 cases.

The cool store is on the direct expansion system. At the time of visiting structural alterations were in progress. Instead of the older system of wall grids the oval system of coils in the roof has been installed so spaced as to give an even temperature throughout the chambers.

From the 47 h.p. Ruston Hornsby engine, power is supplied for running the plant, which has given very efficient running over 7 years. A 25 ton compressor is installed.

In addition to the fruit from the Valley View orchards, the store is used to hold fruit purchased from local growers, in fact, probably 70 or 80 per cent. of the storage space is used to hold the bought fruit.

Group of growers and visitors at Field Day at the Valley View Orchards, Pakenham Upper, Vic.

SUCCESSFUL SCHOOL CHILDREN.

Pleasing Function at S. Ravenswood.

At the S. Ravenswood State School on February 23 there was a happy function when fruit packing prizes were presented by Mr. E. E. Pescott, Senior Horticultural Instructor.

The prizes included the district "Gerrard" Shield, the cup presented by the Bendigo A. and H. Society, also individual certificates won at the Melbourne Royal and Bendigo shows. Considering that this is a school of 12 children only (and some of them very young), the results were astonishing.

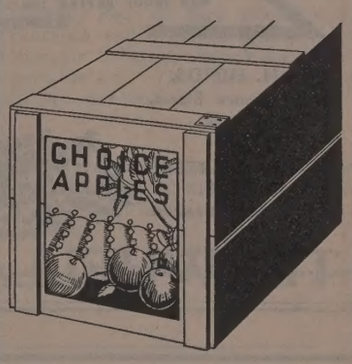
The visitors included the District Inspector, Mr. Hanson, and Mr. R. Downie (Gerrard Wire Tying Co. Pty. Ltd.), who expressed pleasure at the quality of the work displayed by the children.

Two of the children then expressed thanks to the visitors in well-chosen words and addresses were given (by children) on some phases of fruitgrowing (we hope to publish these).

Opportunity was taken to inspect the experimental plot of trees tended by the school children.

VICTORIAN FRUIT STATISTICS.

The statistics published in our last issue on page 12 had reference to the State of Victoria. It was pointed out that while the area cultivated had decreased from 74,763 acres in 1935 to 74,006 acres in 1936, the quantity of fruit produced had increased. Apples rose from 2,085,081 bushels in 1935 to 2,417,425 in 1936; Pears from 1,021,780 bus. to 1,492,062 bus. There were slight reductions in Peaches, Oranges and Lemons.



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THE BEST PASTE

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ADHESIVE

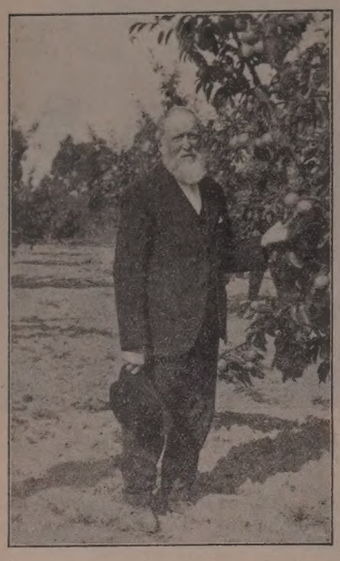
THE BEST
COLD WATER PASTE
IN THE WORLD

Obtainable from all Hardware, Paint and other Stores.

Victorian Orchard Field Days

GROWERS EXPRESS APPRECIATION FOR THIS DIRECT METHOD OF CULTURAL INSTRUCTION, AND ASK FOR ITS CONTINUANCE.

Control of Black Spot and Codlin Moth.



Mr. T. Somerville, a veteran orchardist of Strathfieldsaye, near Bendigo, Vic. Mr. Somerville is in his 87th year.

MUCH ACTIVITY was displayed by officers of the Victorian Department of Agriculture during January and February in regard to demonstrations and field days at the Experimental plots which the Department is supervising at commercial orchards throughout the State.

On January 12, Messrs. E. E. Pescott, F.L.S., Senior Horticultural Instructor, and J. L. Provan, B.Ag.Sc., Horticultural Research Officer, visited the orchard of **J. M. Sinclair, at Bamawm**, where, in company with the local committee and others interested (including the Young Farmers' Club), the demonstration plots were inspected, cordial appreciation being expressed by the growers.

On January 14 the experimental plots at **Lancaster** were inspected by Messrs. Pescott and Provan, these officers being met by Mr. W. Cooper, chairman of the local committee, when the spraying programme was fully discussed.

Mr. Victor McNab's orchard, at **Ardmona**, was visited on January 15, also on the same day the orchards of **Messrs. W. Mulcony, J. Rule and J. G. B. McDonald, M.L.A., at Shepparton.**

Pear picking was proceeding. Freedom from black spot and only slight infestation of codlin moth were observed, in all cases the growers expressing appreciation for this direct method of contact between the Department and the growers in practical demonstration work. It was noted that on Mr. McDonald's orchard where in the past the codlin moth has been troublesome, the infestation has been reduced to .067 per cent.

On January 21, **Strathfieldsaye** was visited by Messrs. Pescott, Provan and Kneen, where at the orchard of **Messrs. Somerville Bros.**, the local committee met the Departmental Officers and discussed the spraying programme.

The demonstration plots at **Harcourt** were inspected on January 22 at the orchards of **Messrs. Ford Bros., G. Douglas and T. Code.**

The local committee was represented by Messrs. H. Ford, J. H. Lane and W. Eagle. The growers stated that the demonstration plots were valuable not only because of results achieved there, but also because of effect in the district in securing clean crops. Mr. Ford expressed keen appreciation for the services of district orchard supervisor Mr. J. Thomlinson in this connection.

On February 9, there was a Field Day at **Mr. J. M. Sinclair's** orchard at **Bamawm**, attended by some 50 growers and members of the Young Farmers Club. Messrs. Pescott, Provan spoke of the Departments field demonstration policy, for which there was urgent need of continuance. Details were given of local aspects of Black Spot and Codlin Moth. The manurial programme was also discussed, especially the necessity for a long range policy.

Mr. G. H. C. Helson, M.Ag.Sc., the officer of the C.S.I.R., who is investigating the Oriental Peach Moth problem, detailed the life history of the pest and the laboratory work being conducted at the Ardmona Cannery.

Appreciation was cordially expressed to the ladies for providing afternoon tea.

One of the most representative and enthusiastic Field Days held this season was held at the orchard of **Messrs. T. Ling & Son, at Wallington, near Geelong.** The attendance was over 150 and included members of the Young Farmers Clubs. The Department officers present included Messrs. E. J. Pescott, J. L. Provan, Harper, F. Greatorex, and Mr. Hatfield. Interesting and helpful addresses were given, for which appreciation was expressed. Here again the ladies excelled themselves in providing afternoon tea in the local hall.

Opportunity was taken to inspect portion of this 60-acre orchard, which was in first class condition and a credit to the proprietors. Apple varieties noted included Jonathan

(Continued on Page 9.)

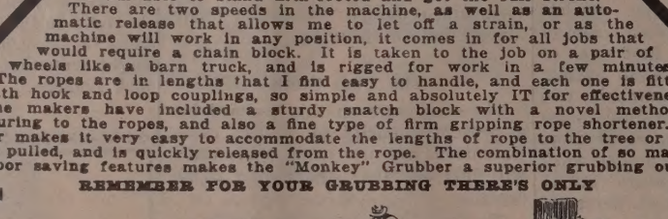
ARE YOU GRUBBING?

Previous experience had convinced me that to be really efficient a grubbing machine should have ample power and ropes that will meet the heavy demands required of them. I found that shovel and axe work is very costly either by itself or in conjunction with a machine. The machine that offered these features, with a host of others, was **THE "MONKEY" GRUBBER.**

It gave me the power of 260 pairs of hands in a simple and compact form; the lever is short, so that I am able to stand firm-footed and get the full stroke. There are two speeds in the machine, as well as an automatic release that allows me to let off a strain, or as the machine will work in any position, it comes in for all jobs that would require a chain block. It is taken to the job on a pair of wheels like a barn truck, and is rigged for work in a few minutes. The ropes are in lengths that I find easy to handle, and each one is fitted with hook and loop couplings, so simple and absolutely IT for effectiveness. The makers have included a sturdy snatch block with a novel method of securing to the ropes, and also a fine type of firm gripping rope shortener. The latter makes it very easy to accommodate the lengths of rope to the tree or stump being pulled, and is quickly released from the rope. The combination of so many time and labor saving features makes the "Monkey" Grubber a superior grubbing outfit.

REMEMBER FOR YOUR GRUBBING THERE'S ONLY

TREWHELLA'S



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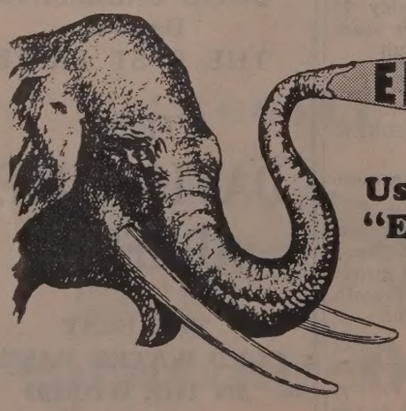

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FRUIT GROWERS generally have come to depend on "Elephant" Brand Sprays. They find them absolutely reliable, efficient and of guaranteed quality.

Use "ELEPHANT" Brand Arsenate of Lead—Quality Stands Alone.

We can supply all your Spray Requirements—ARSENATE OF LEAD (Paste or Powder), **SPRAY SPREADER, SPECIAL COPPER MIXTURE, LIME SULPHUR, WHITE OIL, NICOTINE SULPHATE, RED OIL, Etc.**

Extract "BETTER FRUIT," U.S.A., February, 1934: "Idaho Spray Programme for Codlin Moth Control, 1934," by Dr. Claude Wakeland, Department of Entomology, University of Idaho. Experiments in the State for the past six years have shown that LEAD ARSENATE is the best, as well as the most economical insecticide that we have tested for Codlin Moth control. Entomologists are agreed that there is no substitute for Lead Arsenate that can be recommended to the public.

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S.A.—Silbert, Sharp & Bishop Ltd., Rundle St. E., Adelaide.
W.A.—Westralian Farmers' Ltd., 569 Wellington St., Perth.
Tas.—R. Nettlefold Pty., Hobart. Bell & Gerrard, Launceston. Cocker, Bell Pty., Devonport.
N.Z.—Pizzey, McInnes Ltd., Box 1114, G.P.O., Auckland.

Field Day at Wantirna (Vic.)

THE GOOD RESULTS of the spray programme conducted by the Department of Agriculture on trees at the Burkeland Orchard, Wantirna, Victoria were noted at the Field Day on February 12. Departmental Officers present were Messrs. J. M. Ward (Superintendent of Horticulture), J. L. Provan and Harper, Research Officers.

Mr. Provan gave details of the spraying programme as follows:—

BLACK SPOT SPRAYS.

Stage.	Spray.	Jonathan A.	Jonathan B.
Green Tip . . .	Bordeaux 6:4:40	17-18 Sept.	17-18 Sept.
5-10 per cent. Blossom	Lime Sulphur 3:80	6-7 Oct.	6-7 Oct.
90-100 per cent. Petal Fall . . .	Lime Sulphur 2:80	21-22 Oct.	21-22 Oct.
14-16 days later	Lime Sulphur 1:80	6 Nov.	6 Nov.

CODLING MOTH SPRAYS.

Late Calyx . . .	Lead Paste 5:80	28-30 Oct.		28-30 Oct.
1st Cover . . .	Lead Paste 5:80	12 Nov.		12 Nov.
2nd Cover . . .	Lead Paste 5:80	25 Nov.		25 Nov.
3rd Cover . . .	5:80	Lead 11 Dec.	Wh. Oil 1:60	12 Dec.
4th Cover . . .		Lead 6 Jan.		6 Jan.
5th Cover . . .		Lead 2 Feb.		4 Feb.

It was noted that there was an absence of Black Spot. The infestation of Codlin Moth at this stage was reported at 2 per cent. A full count of the fruit was being made later to determine the extent of the infestation for the season. The time of spraying had been decided upon acording to the peak flights of the moths as indicated by the lure pots.

Appreciation was expressed by growers for the work of the Department in these spraying experiments, with the earnest hope that the Governments (Federal or State) would provide the funds for the continuance of the work.

Mr. Provan said that spraying dates varied in different districts. Much valuable data had been obtained. The important point was to spray in Summer at definite periods following the peak flights. For instance, if the peak flight was on February 16 the lead spray should be applied on February 25 or 26, or the oil spray should be given on March 3. The oil was an ovicide and larvicide.

Local growers expressed the opinion that while white oil might be suitable for other districts, it was not successful as a cover spray at Wantirna, and lead had to be relied upon.

(Continued from page 8.)

Romes, Dunn's, Gravensteins and others.

A visit was also paid to the well-kept orchard of **Messrs. Harding Bros.** Here the Department programme of spraying had been observed, with pleasing results.

Earlier the same day the officers of the Department visited the 10-acre Lemon grove of **Mr. S. Hartwick** (Secretary of the Geelong Association) at **Grovedale.** Some 40 growers were present. The excellent condition of the trees and the heavy crops borne provoked the statement that this was probably one of the best Lemon groves in Southern Victoria.

In addition to the Field Days mentioned above, others were held, about which more detailed description is given in this issue.

Portion of the Burkeland Orchard, Wantirna, Vic., where spraying experiments were conducted by the Victorian Department of Agriculture.

NEW AND INTERESTING BOOKLET ON FERTILISERS AVAILABLE TO ORCHARDISTS.

We have received an advance copy of a thirty-six page booklet written jointly by Mr. O. H. Gepp, B.Agr.Sc. and Mr. R. A. Boyle, M.Sc., entitled "More Profit From Fertilisers," dealing with the use of fertilisers on farm, orchard and vineyard. This little booklet is full of interesting information, and should be on the bookshelf of every man on the land. Copies will be available free on request from all fertiliser companies in each State, or through local fertiliser distributors, or direct from the Advisory Officer, Nitrogen Fertilisers, Pty. Ltd., at either 360 Collins-street, Melbourne; Elder House, Currie-street, Adelaide; or 25 O'Connell-street (G.P.O. Box 2091L), Sydney.

One chapter deals with the structure of the soil and gives in simple non-technical language a word-picture of the activities of soil bacteria, the circulation of nitrogen, and the means by which plants grow.

A chapter devoted to the manuring of the orchard discusses the best means of producing green manure crops and includes comments on the latest ideas regarding "availability" of soil nitrogen. Suggestions for Spring manuring in the orchard are based on these recent ideas.

VICTORIA.

The Goulburn Valley.

Ardmona: Mr. S. P. Cornish (Secretary Northern Victoria Fruitgrowers' Association) writes under date February 27: "We have finished harvesting the W.B.C. Pears, which produced another record crop, and we are now harvesting the mid-season Peaches. Harvesting of the Pullar's Cling Peaches will commence about March 8. This variety is carrying a very good crop."

LA CONTE PEAR.

Export Permitted in 1937.

In response to an urgent request from Tasmania, the Commerce Dept., at the instance of the Aust. Apple and Pear Export Council, has consented to the export of the La Conte Pear this season.

The La Conte is described as a culinary Pear of very attractive appearance and a splendid keeper, and superior to some already on the exportable list. They have realised up to 24/- per case.

:: :: ::

This variety, together with others, will be considered when the Apple and Pear Council has its next annual conference.

Weed, Scrub and Tree Killer

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A Highly concentrated preparation of

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READY FOR IMMEDIATE USE

The most effective and economical of all weedkillers. Definitely eradicates blackberries and all other noxious vegetation. Completely kills useless timber and prevents growth of suckers.

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A Good Cover Crop

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Sowing with

Sulphate of Ammonia

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Ask for

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SULPHATE of AMMONIA is INDISPENSABLE in a WELL-KEPT ORCHARD

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Victorian Fruit Crops

Apples and Pears are plentiful and clean—Normal Crop of Oranges at Mildura—Vintage Proceedings—Hot Weather Needed for Dried Fruit Harvest.

IN a report issued on February 27, the Director of Agriculture states that the export of Apples and Pears is proceeding and that fruit of very good quality is being despatched overseas. In some districts, the crop is above previous estimates.

Clean Fruit Produced.

A reflection of the work in the Departmental spray demonstration plot is seen in the quality of the fruit and in the **freedom from Codlin Moth and Black Spot.** An outstanding report of cleanness was received of a grower in the **Strathfieldsaye** district who harvested 47 cases of export Apples (Dunns) and lost only 9 Apples through Codlin attack. At **Shepparton,** export Pears are unusually clean, and many orchards are reported to be exceptionally so.

Very low infection by Codlin is also reported from the **Mornington Peninsula,** while at **Doncaster** the export fruit being harvested is the best that has been produced for some years. The Gravenstein Apple crop, too, has been particularly good, especially in color.

The Citrus Crop

in the **Swan Hill** district is very patchy, and a second crop has set on many trees, the Valencia crop being on the light side. In the **Goulburn Valley** and at **Cobram** also the **Orange** crop is patchy.

Lemons are yielding a fair Summer crop. Fumigation of citrus at Mildura and surrounding districts is still proceeding, and it is anticipated that there will be an excellent clean up of Red Scale. In this area there will be a normal crop of both Valencias and Navels.

Vintage prospect in all districts are very good. Conditionus in the wine areas have remained favorable during the past month, and although somewhat late, the crop appears heavy.

In the **dried fruit** areas, a succession of muggy days, accompanied by light falls of rain, subjected the ripening Grapes to severe test, and caused much anxiety. Although generally mild, an Autumn development of Oidium, Black Spot and Downy Mildew has occurred in many places. The **Currant** harvest is now practically complete, and, fortunately, the heavy January rains of this year did far less damage than those of last year.

The **Sultana** harvest has begun a little late, but the crops both at Mildura and Swan Hill appear heavier than last year.

Answers to Correspondents.

"Apple Crack," A. G. Elgin, Cape Province, S. Africa, writes: Every year we have to cull large quantities of apples on account of "Apple Crack," and so far we have been unable to obtain really satisfactory control by spraying, though we have tried a variety of programmes, mainly relying on lime sulphur and various forms of sulphur, alone and in combination with lead arsenate. Copper sprays tend to cause russeting and aggravate the injury.

By far our biggest plantings are of the Dunn's Seedling variety, and unfortunately this is the most susceptible to "crack." Australia produces large quantities of Dunn's, yet I have never seen the cracking disease mentioned as of any importance in any of your publications, nor do the Americans appear to have much trouble with it, though of course they may avoid it by not planting susceptible varieties.

There seems to be a doubt as to how much of this trouble is caused by the fungus known as Coniothecium chomatosporum, and how much by physiological causes.

It would be of great help if you could throw the light of Australian experience on this problem, and I should be greatly obliged if you could do anything in this direction. This is an area of Winter rainfall with a fairly hot, dry Summer.

Answer.—The Supt. of Horticulture for Victoria, and Mr. J. M. Ward, furnishes particulars as follow:—"Apple Crack" is well known in Australia, and the variety mostly affected is Dunn's. Up to the present, little or no work has been done in Australia on this disease. Whilst it causes a considerable amount of loss to growers of Dunn's, it is not considered to be a major problem, hence the reason why more attention has not been given to it.

Apples affected with it — unless lightly affected—are not permitted export, but no special mention is made of the trouble in our export regulations; it comes under "free from broken skins." Coniothecium chomatosporum is fairly prevalent in Australia (including Tasmania), but is probably kept in check by the many fungicidal sprays applied to trees for control of black spot (Venturia inaequalis). Nevertheless, these sprays do not keep the fruit free from the trouble.

In his book "Fungous Diseases of Fruit Trees," Dr. G. H. Cunningham (New Zealand) devotes several pages to this particular disease.

"FRUIT WORLD" APPRECIATED.

"I must say I look forward to the 'Fruit World' and think it is the best value for the money of any paper I subscribe to." — (Signed) "W.H.C.". Stanley, Vic.

Black - Spot • Brown - Rot • Mildews

Can definitely be controlled

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Root Stocks for Fruit Trees

Apples, Pears and Plums

Tests with Stocks for Different Varieties and Soils

MY CROPPING PEARS IMPROVED BY BEING ON "QUINCE C" STOCK.

Valuable Research Work at E. Malling, England.

Fruitgrowers and nurserymen are ery interested in the subject of root-ocks for fruit trees. Much valu-ble research work has been conduct-at the East Malling (Eng.) Re-arch Station, this splendid demon-ration station being a regular place r a visit by overseas and local hor-culturists.

:: :: :: ::

Towards the end of 1936 there was field day at E. Malling, and the fol-wing is a summary of the informa-on gained.

Apple Stocks.

No. IX.—This is still the only stock its class. It invariably produces a latively small tree which is quick crop. It needs good farming and not sufficiently vigorous for a poor oil. Trees on this stock need extra ttention in regard to staking and ultivation. Owing to insufficient or nproper staking, some growers have ost hundreds of trees on No. IX. ow-ng to breakage near the union; this s no reason for condemning the root-tock. Wherever growers have learnt o handle trees on No. IX. as they hould be handled, they are finding hem an excellent proposition. Trees n No. IX. will probably be required n larger quantities in future years.

In working No. IX., it is of the ut-most importance that the bud or raft should be placed some inches bove the nursery ground level in rder to provide sufficient stock stem etween the soil level and the union, hen permanently planted. It should e the general rule in nurseries to bud ll fruit tree root-stocks at least some ew inches above soil level.

It has been said that No. IX. is nly suitable for dessert varieties, but arieties such as Lane's and Bram-ey's Seedling have been good pro-ositions and are still doing well on his stock. It is probably true that Jo. IX. is suitable for most varieties, rovided such points as soil and type f tree are not left out of account.

Nos. I. and II.—In the early years, ne differences between these two tocks were sufficient to Class No. II. s a "semi-dwarf," owing to its earlier ropping and amount of wood growth, nd No. I. was classed as vigorous. ince those early days, and as might e expected, different scion varieties ave re-acted in different ways upon hese stocks. For example, trees of ramley's Seedling and Cox's Orange ippin on No. II. are considerably arger than on No. I. Whereas the everse is the case with Lane's Prince lbert. Similarly with Worcester the rees on No. I. are ahead of those on Jo. II. in the matter of size and have lso produced rather better colored uit. Both No. I. and No. II. should e retained for the majority of bush rees according to variety.

No. XVI.—It was hoped that the ery vigorous class of layered stocks ad not been sufficiently proven to ake the place of mixed seedling Crab" populations. Of the former, o. XVI., Crab C, and Long Ashton .F.5, have produced large trees hich, at East Malling, would be itably spaced at 30 to 40 feet apart, ccording to scion variety. No. XVI. the more readily propagated and is robably at present the most useful epresentative of the very vigorous roup of stocks. It is produced on a large scale in Germany under the name of Ketziner Ideal.

Nos. XII. and XIII. — On certain poor sandy soils No. XII. has given medium-sized trees which have cropped fairly early in their lives, but on average soils growth is super-vigorous and cropping is much delayed in this stock. The easily-raised No. XIII. has not performed outstandingly well at East Malling in that the trees have not maintained their early promise of vigor. This stock has proved to be surface rooting; this property probably accounts for the good behaviour of the trees on heavy clay soils. No. XIII. is regarded as preferential to mixed seedlings owing to uniformity of performance of this vegetatively propagated stock.

Nos. IV. and VII. — Other Apple stocks which have been outstanding at East Malling are No. IV. and No. VII. No. IV. has cropped exceptionally heavily, grows as vigorously as No. XVI. in the early years, and it has settled down as a nice-sized bush tree, but it has the disadvantage of being very poorly anchored. Almost all trees which have cropped on No. IV. are now leaning over on all the soils. In addition, it has not proved a good nursery stock when it has been experimentally tested.

Trees on No. VII. grew as vigorously as No. I. in their early years, but soon settled down and cropped heavily, and this stock has since behaved as a typical semi-dwarfing root-stock filling the gap between No. IX. and the more vigorous stocks. Unfortunately, No. VII. has proved to be extremely susceptible to root gall in the nursery, and though at East Malling this has not proved harmful to the trees, it certainly detracts from its value to the tree raiser. This susceptibility has been proved under conditions of artificial inoculation as well as under the Research Station soil conditions.

In addition, Worcester has notably cankered more on No. VII. than on other stocks. Certain varieties, especially Worcester, on No. XI. have behaved well in regard to cropping, but as this stock is exceptionally susceptible both to woolly aphis and root gall, it has not been recommended for general use.

For general purposes, Nos. I., II., IX. and XVI. are all that are required of the root-stocks in common circulation twenty years ago.

Finally, Mr. R. G. Hatton (the Director of East Malling) showed the visitors a selection of the stool beds of the new woolly aphis immune root-stocks of which there are now nearly 600 undergoing preliminary trials. "It will probably be fifteen years before we know enough about any of these to recommend them to you," he said.

Plum Stocks.

Myrobolan B. has consistently proved to be an excellent stock for the production of large Plum trees, and though it delays cropping slightly, it very soon catches up and passes trees on more dwarfing stocks. Moreover, this stock is readily raised on layers or by hardwood cuttings. Myrobolan B. is excellent for Damsons and all heavy cropping varieties.

Brompton has also produced large healthy trees of all varieties and, in addition, has proved excellent for Peaches. It is rather more difficult to raise than Myrobolan B, behaving rather similarly to Common Mussel in this respect.

Common Mussel has been disappointing. The trees on this stock have lost vigor and quite early in their lives and the fruit has not maintained size. In the nursery, Common Mussel is not a favorite owing to its inclination to "spiny" growth, and its tendency to dry out during the budding season. Many Plum varieties show leaf scorch symptoms on certain soils upon this stock. **Peaches grow quite satisfactorily on Common Mussel.**

Common Plum has been shown to be good for Victoria, producing medium-sized trees with early and heavy crops. There is a high percentage of recovery from Silver Leaf. It is unsuitable for Czar, certain other varieties, and Damsons.

Marianna has—against all tradition—behaved exceptionally well in producing medium to vigorous trees which have carried the heaviest crops and, at the same time, the fruit size has been maintained. Marianna is not suitable for Czar or Peaches. It is of great attraction to the tree-raiser on account of its ready rooting on hardwood cuttings.

Pershore is an excellent stock for smaller trees and is compatible with all varieties so far tried upon it. Unfortunately, it is so difficult to raise that it must be regarded as too costly for general use.

Quince Stocks for Pears.

Quince C has invariably produced a tree which has grown as vigorously

Visitors and orchardists at the property of Messrs. Somerville Bros., Strathfieldsaye (Vic.), during a Field Day conducted by the Victorian Dept. of Agriculture. Prominent in the photo. are Messrs. McMahon, Manes, J. H. Lang (Harcourt), T. Somerville, J. H. Thomlinson (Orchard Supervisor), E. E. Pescott (Senior Horticultural Instructor).

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1934	£17,900,000
1935	£24,000,000
1936	£27,970,000

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as Quince A until it has cropped, when it has fallen behind Quince A in tree-size.

Trees on Quince C have cropped heavily and early in their lives, even such varieties as Comice, Hardy, and Pitmaston being affected. It is very useful for shy cropping varieties and for small garden trees.

It is an admirable stock for the production of Cordons. It suffers in the nursery from a leaf spot of Quinces which causes early defoliation if not controlled by simple Bordeaux spraying; under certain seasonal conditions some varieties on Quince C have shown "rough bark" symptoms.

Quince A and Quince B have behaved somewhat similarly in producing good bush trees, and they hav maintained their vigor whilst cro ping. In some cases, Quince B ha produced slightly larger trees wit correspondingly heavier crops.

Layered free Pear stocks have no proved easy to produce economicall in large quantities. This is a pity, a free Pear stocks are very variable both in their compatibility and effec upon different scion varieties. Var ous methods of vegetative propaga tion are still being explored and nucleus of stocks can be supplied i very small quantities.

Generally speaking, the C group se lection—round-leaved thorny P. com munis type—have proved the mos promising stocks and most difficult t raise.

Tasmanian News and Notes

Seasonal Tasmanian Fruit Cultural Conditions are Summarised by the Chief Horticulturist (Mr. P. H. Thomas), as follows:—

Weather and Crops.

Rainfall conditions in the main fruit areas were in complete contrast to those experienced last January, when Franklin and Hobart showed 147 and 65 points respectively as compared with an average of 270 and 182. During the past month the rain recordings were as follow—Franklin 404, Hobart 338, and Launceston 483. Such exceptional rainfall has been conducive to vigorous growth and rapid fruit development. On the other hand an increase in fungal disease amongst all fruit has been noted. Towards the end of January there were several days of strong winds and a certain amount of damage has occurred. The prevalence of dull showery days held up the ripening and harvesting of berry fruits and the picking of Apricots.

Spraying and Disease.

As already mentioned, weather conditions have encouraged the development of black spot, and though this is still well under control, during the last three weeks a fair amount of affected fruit could be found. Mildew has not caused much trouble to date in orchards receiving the ordinary spray programme.

Amongst other fruits **Apricots**, previously almost completely free from brown rot, have shown a mild infection since the commencement of picking.

Raspberries and Strawberries have ripened very slowly in most localities and mouldy trusses are not uncommon amongst the former. Whilst splashed berries, rots, and blossom wilt have succeeded in reducing the latter by fully 35 per cent.

Late **Cherries** and **ripe Gooseberries** suffered loss through rain splitting and subsequent rotting.

Codlin moth is much less severe this year than last in orchards where adequate precautions have been taken. Canary fly also, which hatched in large numbers during the early part of the season, has been practically eliminated in many districts where nicotine and other sprays have been regularly applied. The second brood is apparently much later this season, and where numbers of the young insect are seen, nicotine (1 pt. to 70 gallons) applications should complete control. This month red spider seem to have been noticeably checke mainly through unsuitable weathe conditions. The light brown Appl moth ("green grub") appears to b less severe than last year, but it i probable that this is in part due t the lateness of the second brood, an if this is so, much later arsenat sprays may require to be applied.

If late spot increases, colloida sulphur at the rate of 2 lbs.-100 gal lons should give the desired contro under normal conditions.

General.

With a good flow of sap and satis factory conditions for growth, graft have done very well this season Where excessive growth has bee made, Summer tipping should be car ried out to prevent possible wind dam age and breaking off. Ties or tap must, of course, be removed wher any signs of constriction or chokin are in evidence.

Thinning has been completed i many orchards, and much diseased o blemished fruit thus eliminated. Th danger of overdoing this practice o varieties which have a size limit un der the overseas export regulation must be realised, especially under th moist soil conditions now in evidenc everywhere.

Overseas Export Regulations.

The amended regulations for th 1937 export season have already bee published in the press, but a brie resume of the main modifications wil not be out of place since some o the points may not have been quit clear.

The leading amendment upon whic most enquiries have been received i the variation in the width of th dump case. This means that grower now can ship in dump cases having measurement of 18 in. by 14¼ in. b from 8.2/3rds. of 9 in.

The second important change is th adoption of a Pear variety schedul on similar lines to that used now fo Apples. A number of minor altera tions have been effected regarding th sizes and color requirements of varie ties, and in regard to certificates. A chart has been prepared by the De partment of Agriculture detailing th regulations and amendments in ful and it is hoped that these will b available to growers towards the en of this week.

The Apple season will on the whol be later than last year, though th fruit is coming well up to size as result of January rains.

Growers should now be overhaulin their harvesting, grading, packing an storing equipment so that when ex port eventually commences they wi be in a position to handle the fru without hitch or delay.

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The American Pacific Coast Apple Districts

APPLES GROWN UNDER IRRIGATION IN WASHINGTON STATE — CODLIN MOTH MOST SERIOUS PEST — PROBLEMS OF SPRAY RESIDUE REMOVAL — IS PREFERENCE FOR HIGHLY-COLORED APPLES OVERDONE.

NO. 1 OF SERIES.

Section of valuable Report by Mr. P. H. Thomas, Chief Horticulturist, Tasmanian Dept. of Agriculture.

DURING THE PERIOD I was in America and Canada the following Apple-growing districts were visited:—

California: Sebastopol, Lake Country, Placerville.
Idaho: Boiso, Weiser.
Washington: Yakima, Wenatchee.
British Columbia: Okanagan Valley.

I desire to express thanks to all those connected with the industry for the courtesies extended during my visit. Every facility was given me to study the differing conditions of culture, packing and marketing and the assistance rendered was invaluable.

Arriving in California at the end of August, when the Gravensteins and Jonathans were being harvested, an opportunity was presented to inspect the methods of picking and packing these varieties. In Idaho practically the whole of the crop is marketed in a special type basket. Here again the same varieties were being handled, whilst in the large Washington centres of Yakima, Wenatchee and Okanagan, B.C., the Jonathans, Delicious and Mackintosh seasons were in full swing.

In presenting this report I have endeavored to enumerate the essential points of interest under their different captions rather than detailed descriptions of each district.

For purposes of comparison the different rates and costs should be assessed on the £1 sterling being at par $4.80. At the present exchange rate operating between Australia and U.S.A. and Canada, the Australian £1 is worth approximately $3.92.

Production.

It is generally conceded that Washington is the principal Apple-growing State of U.S.A. Here, with irrigation, a large industry has been built up. With the aid of water, areas of land have been reclaimed from the desert, and modern cities of 12,000 to 24,000 inhabitants replete with all municipal and social conveniences have come into being. For this wonderful development the Apple has been primarily responsible, and is the main source of direct or indirect income to those resident in the localities. During the past six years, conditions have not been as prosperous as formerly, and in very few districts are new areas being planted. **Apart from the depression, higher costs of production and marketing, growers have to meet the increasing competition of other fruits, most of which are controlled by very efficient organisations who through attractive advertising are constantly keeping their products before the public.**

In many districts large areas of orchard have been grubbed out or abandoned. In the State of Washington it is estimated 10,000 acres of once profitable orchard have been removed during the past five years.

Climatic conditions in the N.W. Apple States are very different from those experienced in Tasmania. Commercial production is only possible under irrigation, the average rainfall ranging from 9 in. to 12 in.

One is impressed with the organised effort that is everywhere apparent in meeting the existing difficulties. The keynote is efficiency. Growers generally realise this, and, as was frequently expressed to me in discussing the relative position between East and West centres of production: "the difference in costs is approximately 90c. a bushel in favor of the Western barrelled Apple trade. **We can only compete by rigidly adopting such a high standard of quality, packing and presentation that will give our Apples a favored position on the market."** Costs of production naturally vary considerably, but in an average type full-bearing orchard, they are estimated at from 30-36c. per bushel.

Varieties.

In the majority of districts production is now mainly centred in those varieties which have proved suited to the locality, and are in popular favor.

With the exception of the Sebastopol area in California and Okanagan in B.C., where a fair quantity of Gravenstein and Mackintosh respectively are grown—the Delicious, together with the red sports "Richared" and "Starking," Winesap, Jonathan, Rome Beauty and Newtown are predominant. In Wenatchee Valley during the 1935 season, out of an annual car shipment of over 11,000,000 boxes, Delicious represented 46 per cent. and Winesap 36 per cent. of the total. **The colored dessert Apple is the prime market favorite and the tendency is to still more accede to the public choice by developing redder strains of the popular varieties.** A number of growers and those interested in the industry expressed the opinion that this, in the end, may have a detrimental effect on the marketing of these kinds, growers being prone to pick to color rather than maturity, in the desire to be first on the market. The quality of the fruit which I inspected in the orchards and packing houses was of a very high order and a large percentage of "Extra Fancy" fruit should be packed out this season. As an example. At a packing house in the Yakima district out of a line of 1,100 cases of Jonathan, the grading was as follows:—Extra Fancy, 85 per cent.; Fancy, 10 per cent.; C. Grade, 2 per cent.; Culls, 3 per cent.

Interior of a Packing Shed in Sebastopol, U.S.A.

Irrigation.

Practically the whole of the production of the N.W. Apple districts is dependent on the irrigation systems which have been gradually extended from the early days of settlement.

Under natural conditions the country is barren and arid, being covered with a low sage bush. The line of demarcation where water is available is very sharply defined and at many places one virtually steps out of a productive orchard into desert country. Full advantage has been made of the snow fed rivers which flow through the State, and with the assistance of gravity and pumping stations, large areas of land have been reclaimed for cropping and planting.

Most of the systems are financed by a general reclamation charge applied over the areas served, ranging from $150 to $200 per acre.

Maintenance charges also vary, but would average an annual rate of $12 to $16 per acre.

Irrigation is the life of the country, and if an area is neglected and does not receive any water for a season the result is disastrous to orchards and other established field crops.

At Grand Coulee, in Washington, a project is under construction which will rank amongst the world's largest hydro-electric and water conservation schemes. The deep and swiftly-flowing Columbia River is being dammed and raised to a level which will allow it to be diverted to a locked valley which was its original bed many thousands of years ago. This scheme is being undertaken with relief labor, and when completed, will serve a large district with electricity and water for irrigation.

In the drier districts of Washington, irrigation is applied on an average every ten days during the Summer period, whilst in the Okanagan Valley, B.C., where the rainfall is higher, the applications would be at longer intervals.

Cultivation and Manuring.

Tasmanian fruitgrowers might consider the average N.W. Apple orchard rather neglected from the cultivation viewpoint. Clean cultivation is nowhere practised, and during Spring and the Summer months, every effort is made to develop green cover crops, alfalfa (lucerne) or sweet clover (Melilotus alba) being most favored. These are disced in during the following Spring. Deep ploughing is hardly ever resorted to; irrigation induces a fairly shallow root development, and growers are averse to applying any system that might result in root injury or the formation of a soil pan. At the time of my visit, harvesting was proceeding in many orchards amongst crops three to four feet high. Chemical fertilisers are used, especially sulphate of ammonia, the general practice being to apply these supplementary to turning under the cover crops.

The N.W. Apple growers' costs of cultivation and manuring are lower than the average area under dry culture, and to a certain extent offset the higher rate that has to be met for other orchard operations.

Pruning.

Pruning is carried out on very different lines to that adopted in this State. The young tree is encouraged to make two or three well spaced limbs and then practically left untreated except for an annual thinning to eliminate all crossed or badly positioned branches. Under such treatment a fairly close umbrella-headed tree results, bearing the majority of its fruits on the outside branches. It is a wonderful sight to visit the orchards prior to harvesting and see the long laterals covered in even well-colored fruit.

Fruit thinning is generally practised in order to obtain a well developed and even crop. This forms an important item in the annual expenditure, but the results more than repay the necessary outlay.

Pest Control.

By far the most serious pest the fruitgrowers of N.W. America have to contend with is the codlin moth. The increase and spread of this pest is causing considerable concern to all connected with the industry, and during recent years it has been partially responsible for the abandonment of large commercial areas of orchard.

Fortunately, until recent years, the northern area of the Okanagan Valley in British Columbia, has remained fairly free from infestation, but it appears to be slowly moving north, and infestation is already becoming serious in orchards adjacent to the border.

Control is difficult and can only be obtained by close attention to treat-

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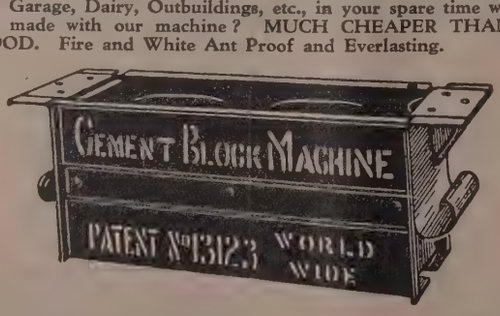

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ment, arsenicals still being relied upon as protective sprays. The problem fruitgrowers are now confronted with is a fourfold one. At the time of my visit the trees on the majority of commercial orchards were white with residue, and in the seriously infested districts it was somewhat difficult to realise you were travelling amongst Apple orchards. **Under the present conditions effective control cannot be obtained without a heavy spray residue being left on the fruit. Expensive washing machines have to be installed and all fruits are generally passed through at least two baths at high temperatures with subsequent rinsings to bring the deposit under the recognised tolerance.**

Although careful supervision is maintained over these washings, there is evidence that they may sometimes affect the keeping qualities of the fruit owing to the removal of the natural skin wax in the process.

Already a firm has placed an artificial wax to replace that removed, and Apples are treated with this after going through the washing machines. The problem does not finish here; the constant heavy application of arsenical sprays under a light rainfall is affecting the fertility of some of the surface soils of the orchards, and in some cases difficulty is being experienced in growing the necessary green cover crops.

At present efforts are being directed toward finding an effective substitute for arsenate of lead. Oil-nicotine, fluorine phenathizienne and several calcium arsenate combinations are being tested. Several of these, particularly the oil-nicotine treatment, are of a promising nature. Through the courtesy of the Department of Agriculture and commercial firms I was able to inspect the different plots treated this season and note the general results obtained from the different treatments. The problem of neglected or semi-abandoned orchards is also difficult, as these constitute a breeding ground for codlin and other pests.

Fortunately under the climatic conditions these neglected areas do not exist very long, as one season without water generally results in serious injury or death of the orchard trees. Other pests which are of economic importance are the red spider (Tetranychus telarius); tarnished plant bug (Lygus practensis); and several species of jasseds. The treatments adopted for the control are similar to those used in Tasmania, and embrace oil-nicotine combinations.

Fungus disease, with the exception of powdery mildew, is practically unknown, except in the N. Okanagan Valley, where scab (Venturia inaequalis) is sometimes troublesome.

(To be continued.)

APPLES IN GAS STORAGE.

Interesting Developments in England.

We are indebted to Mr. Frank M. Read, M.Ag.Sc., Chief Inspector of Horticulture, Victoria, for the following extract from "Cool Storage News Letter," published by the Minister for Agric., Ottawa, Canada, December, 1936.

The extract is as follows:—

New Apple Gas Storage, Bedfordshire, England.

THE OPENING CEREMONY of the new fruit gas store at the Cox's Orange Pippin Orchard, Cockayne, Hatley, Bedfordshire, was performed recently by the Duchess of Montrose.

It was very interesting to see this intensive system of Apple cultivation. So far, 450,000 trees have been planted, and by Christmas this year, another 650,000 Apple trees will be planted, the total covering an area of 2,000 acres.

The general layout and details of construction of the store, coolers, oxygen scrubbers, etc., have been designed and supervised by Mr. J. Pique, of Cambridge, who recently resigned from the staff of the Food Investigation Board.

The storage plant is housed in the most substantial structure so far erected in this country for fruit storage. A brick-built packing shed is provided, measuring 80 ft. by 60 ft. by 20 ft. high at the eaves, well lit, and properly ventilated. The packing shed gives access to six Apple stores in specially constructed ventilated trays, at a temperature of 39 deg. Fah. The fruit intended for prolonged storage will be placed in a chamber provided with means to maintain the storage atmosphere at 5 per cent. carbon dioxide and 2.5 per cent. oxygen.

The building has been designed to provide for easy extension of the storage plant with a view to increasing storage accommodation to several hundreds of tons in view of the anticipated enormous crops of these orchards in the coming years.

Two Frigidaire Freon compressors are installed, having been supplied by Messrs. Automatic Electrical Refrigerators Ltd., of Bedford. The larger of these, driven by a 5 h.p. Delco motor, cools four of the chambers, while the other, a 3 h.p. F 6 unit, takes care of two storage rooms. A multi-point Cambridge temperature indicator gives four separate readings for each room, the temperature of these rooms being controlled by a "Teddington" thermostat.

SOUTHERN VICTORIA FRUITGROWERS' ASSOCIATION.

At a meeting of the executive of the Southern Victoria Fruitgrowers' Association held at Box Hill on February 4, 1937, there were present Messrs. F. G. Beet (President), O. White, F. C. Pyke, G. G. Miller, W. A. Thiele, L. Webb, E. Noonan, and the Secretary, J. W. Aspinall.

The business dealt with included matters relative to the Victoria Market, annual conference of the Chamber of Agriculture, the legal case re faulty carriage of Pears in "Port Brisbane," black spot experiments, and Doncaster field day.

Messrs. F. G. Beet and W. A. Thiele were appointed to represent the Association re proposed Apple publicity campaign by the Apple and Pear Council.

It was decided to write to several members of Parliament supporting the efforts of the Northern Victoria Fruitgrowers' Association to secure better preferential duty on Australian canned fruits entering the United Kingdom.

TASMANIA
Leading Australian Firm of Fresh Fruit Exporters.
Manufacturers IXL Jam and Canned Fruits.
Hop Factors—Largest Cool Stores for Hop Storage in Commonwealth.
All Orchard Supplies available at all times.
Agents for—Associated Evaporated Apple Manufacturers, Eagle, Star & British Dominions Insurance Co. Ltd., Federal Steam Navigation Co. Ltd., Scottish Shire Line of Steamers, Osake Shosen, Kaisha, Blue Star Line Ltd.

Correspondence Invited.

H. JONES & CO. PTY. LTD
Hobart.

DRIED FRUITS NEWS AND NOTES

Mildura Co-operative Fruit Co. Ltd.

HIGHLY SUCCESSFUL SEASON.

THE THIRTY-SECOND annual meeting of the Mildura Co-op. Fruit Co. Ltd. was held at the Mildura Town Hall on February 13, 1937. Mr. A. L. Johnstone, chairman of directors, presided and presented the annual report which stated (inter alia)—

The company's funds have now reached the total of £100,000. Despite the fact that the 1936 harvest was a difficult one owing to unseasonal rains at drying time, the marketing of the pack was highly successful, it being many years since there was such a complete clearance of stocks. Currant prices unfortunately were low. Sultanas had a bright selling season, the average London price being £43 per ton, an advance of £3/10/- per ton over the previous year. Lexias saw a spectacular rise in the U.K. market on account of the regrettable civil war in Spain.

The company's business was steadily expanding. Great improvement had been effected by rebuilding the Merbein building in brick. The company has joined with other Mildura packing interests in the purchase of Messrs. Crowe and Newcombe's business at Coomealla.

The use of Eranol as a preventive against grub infestation, was so satisfactory that it could be said this problem was being successfully combated.

The citrus packing business was growing: this season 73,812 cases had been handled, an increase over the previous season. Citrus fumigation against red scale was practically compulsory. The company had three gangs operating with 90 tents, and this season expected to fumigate 70,000 trees.

The chairman outlined the vigorous activities engaged in to secure a "Yes" vote at the referendum.

Appreciation was expressed for the services of the manager, Mr. D. C. Winterbottom, and the staff.

Messrs. A. L. Johnstone, J. P. Power and L. B. O'Donnell were re-elected directors for two years.

A dividend of 7 per cent. on shareholders' capital was agreed to, also interest on bonus deposits at the same rate: there would be a rebate of £1 per ton on the dried fruit received and 1½d. per case on the citrus fruit packed.

Appreciative references were made as regards the substantial preferences in Great Britain, Canada and New Zealand.

Some Interesting Figures.

The following interesting details concerning the production of dried fruits in Australia was submitted to the meeting:

The Commonwealth production for the 1936 season was: Currants, 12,148 tons; Sultanas, 43,708 tons; Lexias, 6,909 tons. Total, 62,765 tons.

Of the above, the quantity packed in A.D.F.A. sheds was: Currants, 10,630 tons; Sultanas, 41,130 tons; Lexias, 6,390 tons.

The total quantity received in Mildura and district was Currants, 4,553 tons; Sultanas, 30,469 tons; Lexias, 4,605 tons.

Of this quantity the company received: Currants, 1,526 tons; Sultanas, 7,320 tons; Lexias, 1,240 tons.

Other dried fruits packed were: Apricots, 34 tons; Peaches, 54 tons; Nectarines, 4 tons; Pears, 4 tons; Prunes, 5 tons; Figs, 1 ton.

Fresh fruit packed by the company was: Citrus fruits, 73,812 cases; Grapes, 34 cases; Pears, 1,090 cases.

Red Cliffs Co-op. Packing Co. Ltd.

EIGHT PER CENT. DIVIDEND PAID PLUS BONUSES TO GROWERS.

THE PLEASING SUCCESS of the Red Cliffs Co-operative Packing Co. Ltd. was revealed at the 38th annual meeting of shareholders held at Red Cliffs, Victoria, on February 12, Mr. F. W. Hammet, chairman of directors, presiding.

The annual report which was presented by Mr. Hammet showed that the paid-up capital had been increased by £5,666 to £43,351. By placing £4,000 from this season's operations to reserve, this item was now £10,000. The gross profit of £6,716 was added to the appropriation account, which previously stood at £4,696. A dividend of 8 per cent. was agreed to, this absorbing £3,468. It was also decided to increase the bonus from £1/5/- per ton (last season) to £1/10/- per ton on this season's business. The tonnage of Currants, Sultanas, Lexias and Walthams, packed during the season were as follow:—

	1933. Tons.	1934. Tons.	1935. Tons.	1936. Tons.
Currants .	776	755	761	585
Sultanas .	6,139	4,675	3,894	5,948
Lexias & Walthams	813	606	604	914
Totals .	7,728	6,036	5,259	7,447

Sales were satisfactory, the whole of the pack having been cleared. Improvements have been made in the building, plant and machinery, the company now having decided to install electric weighing machines with packing hoppers.

Reports were presented concerning the increased turnover in the merchandise department. The citrus pack was larger than last year and the prices received by growers were easily the best for several years past. The directors thanked the management, staff and employees for loyal and efficient services.

Appreciation was expressed by the shareholders for the good services of the board.

Mr. H. R. Sloan, manager, appealed to growers to support the Victorian Central Citrus Association, as there was a danger of that Association losing its effectiveness because of the lack of loyalty on the part of some growers. He considered that organised marketing, which had done so much for dried fruits, was just as necessary for citrus fruits.

There was a good attendance at the meeting, which included, in addition to the chairman, five other directors —namely—Messrs. W. Cavendish, H. Youngs, A. McKinnon, A. Poppleton and C. M. Mackie.

It was announced at the meeting that the three retiring directors: Messrs. Poppleton, Mackie and Young, were offering themselves for re-election, while Mr. A. C. Macdonald and Mr. C. Wake had also been nominated. The chairman announced that the ballot would close on March 1.

Demonstrating Australian dried fruits in one of London's largest department stores. During ten days 18,185 customers were attended to by six demonstrators and 17,670 tasting samples were distributed. Sound films were also seen by 25,300 people.

MILDURA DRIED FRUITS ASSOCIATION.

Voluntary Agreements Regarding Export.

THE ANNUAL MEETING of the Mildura Dried Fruits Associations was held at Mildura on February 13. Mr. E. J. Roberts, who presided read the annual report, which traversed the statistical position of the industry and demonstrated the importance of the A.D.F.A., and the necessity for a "Yes" vote at the Referendum.

"It is pleasing to report," stated Mr. Roberts, "that with the exception of one grower in the districts of Mildura, Merbein, Red Cliffs, Curlwaa and Coomealla, the whole of the production is marketed under A.D.F.A. conditions."

Continuing, the chairman said there was naturally some uncertainty as to the marketing of dried fruit. The A.D.F.A. was actively negotiating with non-A.D.F.A. interests with a view to reaching agreement on voluntary export for 1937. Agreement had been reached with all except two in S. Australia, and if these interests eventually agreed to do their share of export there would be no difficulty in maintaining the price level in Australia for the coming season.

Prospects in export markets for all fruits were reasonably good, excepting for Currants in U.K.

Trade With Canada.

The expiring provisions under the Ottawa Agreement had been met by the provisions of the Australia-Canada trade treaty: Canada imposing a duty of 4 cents on foreign dried fruits, Australian dried fruits being admitted free.

It was reported that the fruit affected by hail was improving, and that hail marks were expected to disappear in the dipping process.

The retiring trustees, Messrs. Forbes and Schmidt were re-elected, the other trustees being Messrs. Henshilwood and Gordon. Mr. Roberts was re-elected chairman.

Mr. P. Malloch, a member of the Board of Management of the A.D.F.A. sounded a note of warning concerning the increase in the production of Lexias.

HOW A.D.F.A. SALES INCREASE.

Consistent Rise Every Year.

In 1936 the Australian Dried Fruits Association handled 93 per cent. of the total Australian pack of 67,000 tons. Counting all varieties, the Australian market was served with 15,676 tons. The average wholesale price was £60 per ton, representing a turnover of one million pounds.

An interesting comparison is seen in the increased sales of the Association during the three years 1933, 1934 and 1935. Figures for 1936 are not yet available, but the increase is expected to approximate that of the two previous years. The following figures represent net A.D.F.A. sales for the Commonwealth and are expressed in tons:—

Variety.	1935.	1934.	1933.
Currants . . .	3,207	3,152	2,935
Sultanas . .	7,316	6,725	6,244
Lexias . . .	2,923	2,719	2,438
Apricots . . .	516	424	539
Peaches . . .	213	131	190
Nectarines . .	25	18	23
Pears	72	56	61
Prunes	1,404	1,125	1,008
Total	15,676	14,350	13,438

Dentist: Will you take gas, Mr. Smith?

Motorist (absent-mindedly): Yes, Doc and you'd better look at the oil too!

SOMERVILLE AND DISTRICT FRUITGROWERS' H. & A. ASSOCIATION

— o —

41st Annual Show

GREATEST FRUIT SHOW IN SOUTHERN HEMISPHERE

Wed. 24th March, 1937

For full particulars and Schedules Apply to—

A. F. TELFORD, Secretary, Somerville, Vic.

South Australian Dried Fruits Board

THE Sth. Aust. Dried Fruits Board met on February 15, when all the members and the Secretary were present, with the exception of Mr. Murdoch, who was absent in Western Australia. In connection with the Trade Agreement, Secretary reported progress.

Correspondence in connection with the referendum was submitted, together with an article appearing in "Smith's Weekly," shown as being contributed by F. A. James and containing allegations against the Board in connection with certain prosecutions for offences against the Dried Fruits Act. A memorandum prepared by the Secretary and compiled from the Board's records, countering these allegations, was also submitted and the Secretary was authorised to make a press statement from these notes setting out the true position concerning the prosecutions referred to.

The annual report of the Investigation Officer (Inspector Birt) for the year ending 31/12/36 was received. Arising out of the Committee's recommendations, the Board agreed to co-operate with the Victorian Board in making a contribution towards a common fund to meet the cost of enquiries into reports of unlawlful trading in N.S.W., Victoria and South Australia, and suggested that the N.S.W. Board prepare a programme showing the estimated cost for one year and the nature and extent of such investigations.

The opening home consumption quotas, as recommended by the Consultative Committee, were considered at length. After a review of the estimated production for the year 1937, with the exception of Apricots, the recommendation was accepted. The recommendation for Apricots was 100 per cent. home consumption quota but, in view of the fact that South Australia normally produces 80-90 per cent. of the total Commonwealth production and of the present export position, it was agreed to ask the Victorian and N.S.W. Boards to adopt a quota of 80 per cent.

The levy for the year 1937 was considered in connection with the budgetary statement for the current year, and it was agreed to fix the levy at 5/6 per ton, being the rate adopted by the Victorian and N.S.W. Boards.

Secretary tabled report on the A.D.F.A. request to make a regulation governing grade standards to be displayed by retailers and it was agreed it was more desirable to obtain the co-operation of the Retail Storekeepers' Association in educating the public in the matter of grade standards than to impose a restrictive regulation on the trade.

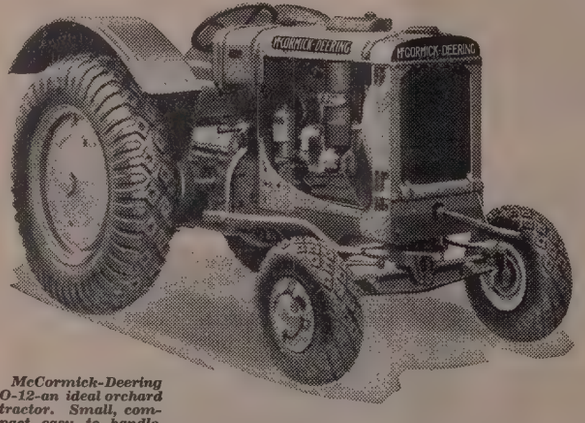
The appointments of grading inspectors for the season 1937 were confirmed, and these were formally appointed as officers under the Dried Fruits Act. Secretary was directed to arrange a conference of Board representatives and inspectors at Bramera at an early date.

A number of applications for new dealer's registrations and renewals of dealer's registrations were considered as well as packing registrations.

W. N. TWISS, Secretary.

18/2/37.

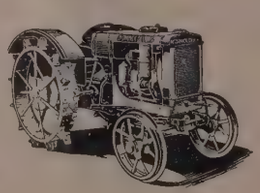
POWER FOR ORCHARDS and SMALL FARMS



McCormick-Deering O-12-an ideal orchard tractor. Small, compact, easy to handle.

McCORMICK-DEERING Tractors . . .

ORCHARDISTS, vignerons and small farmers will find their need for power nicely catered for in the McCormick-Deering line which, in addition to medium-sized tractors and big tractors for big farms, also includes a complete range of models for use on small properties. These compact, agile tractors are the essence of economy, and will accordingly measure up to the requirements of the orchardist, virgneron, and the mixed farmer. See your McCormick-Deering agent or write us direct for full information.



THIS is the W-12, another popular McCormick-Deering tractor that will prove its value on the small farm. It develops plenty of power from a sturdy 4-cylinder engine, is easy to handle, and turns in a 9-ft. radius. Both the W-12 and the O-12 operate on power kerosene.

INTERNATIONAL HARVESTER COMPANY OF AUSTRALIA PTY. LTD.
(INCORPORATED IN VICTORIA)
543-555 BOURKE STREET, MELBOURNE, C.I.

IS JAPAN A MARKET FOR OUR PRUNES?

Well Worth Investigating.

From a report recently issued by the Eastern Trade Section of the Commonwealth Department of Commerce, it would appear that a limited trade for Australian Prunes might reasonably be expected in Japan. The Japanese-produced Prune is a sour Plum called "Umeboshi," and is more suitable for pickling than for table use, although it is popular included in boiled rice dishes.

It is said that if the Japanese could be educated to appreciate the sweetness and dietetic value of good Prunes, a worthwhile trade could be established. A large foreign population supports this expectation and, at present, all of the Prunes seen in the stores come from California. In comparison with these, the Australian Prune is superior, being softer and less dry, therefore should receive a welcome, especially as the general stores do not seem to keep regular supplies.

In spite of prices for Australian Prunes being slightly higher than for Californian, it is not too high to affect competition. The usual packs are 5 lb. tins. Prunes packed in bulk are dutiable at 100 per cent., whereas small-packaged Prunes are only subject to a duty of three-farthings per lb. The C.I.F. landing price, plus duty, makes landing costs about 5½d. per lb. Though the retail price varies with the clientele of the stores, leading Tokyo stores sell at 9d. to 10½d. per lb.

The report closes with the suggestion that a reasonably good market is available in Japan for Australian Prunes, and the Department of Commerce is willing to supply the names of leading agents who might be interested in this trade, also to give any fuller particulars required, on request.

BELOW-STANDARD DATES.

U.S.A. Government Buys Them Up.

The Secretary of Agriculture has given approval to a policy of Government in buying up the below-standard surplus of the 1936 Date crop for the purpose of making by-products. California produces practically all the Dates harvested in U.S.A. Seven million pounds were produced in 1936 compared with the five-year average from 1930-34 of about four million pounds. It is anticipated that the annual production at the end of the next five years will approximate 16 million pounds.

The object of Government diverting the surplus into by-products channels is said to be to encourage development along these lines so that the greater production, which is predicted, can be readily absorbed.

Fruit Growers! CEYLON CALLING

Consign your Fruits (Apples, Grapes Oranges, etc.), to a Fruit Specialist. You cannot afford to miss the opportunity of giving me a trial for promptness and highest market prices. Cold storage facilities available. Inquiries solicited.

J. A. EDWIN DE SILVA, 21 Wasala Rd., Colombo, Ceylon.

SURPLUS PRUNES.

U.S.A. Government Takes the Lot.

In an effort to assist Pacific Coast Prune growers, the Government will buy all surplus under-standard Prunes left over from the 1936 pack and distribute them through relief agencies. This will stabilise the market for standard Prunes and eliminate possibilities of a collapse in the industry. Efforts will also be made to divert substandard Apricots and Prunes into by-products channels. In this way it is anticipated that carry-over of vast quantities will the obviated.

BIG ADVERTISING CAMPAIGNS PAY.

Del Monte Includes Dried Fruits.

In 1923, the California Packing Corporation ran an advertising campaign on Spinach. In 1927 it concentrated on canned vegetables. In 1936 it conducted a special publicity campaign on Pineapple juice. In every case sales showed a remarkable increase.

Now they are conducting a large campaign for Del Monte Prunes, Raisins, dried Peaches and Apricots, and believe that results will be equally outstanding. A national advertising programme includes color space in 22 larger metropolitan newspapers, a series of color pages in leading women's magazines, besides black and white advertising linked up with Del Monte's regular standing advertising contracts.

Naturally this special effort incurs a tremendous expenditure but, in view of past successes, the results anticipated must prove to be satisfactory.

SALES INCREASE 100 PER CENT. AT 1937 BRITISH INDUSTRIES FAIR.

A report from London last week states that at the 1937 British Industries Fair, there were recorded record attendances, 10,000 more visitors attended than last year, and increased business was reported in all departments. The demand for Australian dried fruits was gratifying, and sales were computed to be 100 per cent. higher than last year. Dairy produce sample lines from Australia and New Zealand were said to have experienced sales equalling three times those distributed in 1936 Fair.

DRIED TREE FRUITS.

Represented on the Board.

Nominations were recently invited for a representative of tree fruit growers on the Victorian Dried Fruits Board. This followed legislation passed last year that tree fruit growers should be given official representation on the Board, necessitating the increase of members to five. When nominations closed, only one had been received, and Mr. D. E. Barry Wood, orchardist, Tongala East, was declared elected. The Board now consists of four representatives of the vine fruits growers, one of tree fruits growers, and one Government nominee.

Give advice by the ounce—example by the pound.

Canned Fruits Industry Reviewed . . . . . .

An Interesting Position Negotiations with Britain

THE Australian canned fruits industry, unlike the dried fruits industry, is in the enviable position of being able to readily sell overseas more than its normal surplus that is not consumed in Australia. Exports are increasing every year, and yet there is room for more, though the saturation point is probably within sight.

Growers are able to dispose of their canning varieties in Peaches, Pears and Apricots to the canners at prices that pay a reasonable return over cost of production. The tremendous absorption power of the British market, plus the interesting Canadian and New Zealand markets that have recently been developed, assures a continuance of these happy conditions, for the present at least.

With the British market already cultivated and growing business being experienced in the other two markets mentioned, there is little need to exploit further rather problematical markets such as is suggested as being available in the East. Our greatest outlet is Great Britain, wherein conditions, although comparatively favorable, could be improved upon.

Negotiations with Britain.

For years the ultimate objective of a preference of 2/- per dozen 30 oz. tins in favor of the Empire has been urged by Australia. To meet present world financial conditions, the British Government has been asked to tentatively approve of a 1/6 per dozen flat rate instead of the present operating duty of 15 per cent. on foreign canned fruits. It is claimed, for Australia, that the 15 per cent. duty on foreign fruits, while representing a sufficient preference when Britain was on the gold standard, now, because of fluctuations in dollar exchange that have since occurred, the ad valorem duty of 15 per cent. does not give Australia that corresponding preferential advantage originally intended. Actually 15 per cent. represents to-day a preference of only approximately 10d. per dozen, which is not enough. A rate of 1/6 per dozen tins would approximate an increase of about £3 per ton of fresh fruit used in canning, the present export quantities, a large porportion of which would be returnable to the growers.

It was hoped that this long-negotiated fixed-rate preference would be considered at the coming Imperial Conference, but according to present indications, no provision has been made for such approach by the Federal representatives who will attend at the Coronation and other engagements in London.

In view of the prospects of trade agreements being concluded between Britain and U.S.A., it seems reasonable to suppose that the latter country will ask more favorable consideration regarding the duties upon her exports to Britain. Should the 15 per cent. levied on foreign canned fruits be lowered—or entirely suspended—even the present unsatisfactory preference in favor of Australia would be lost, with subsequent danger to the industry in this country.

Unfortunately, the Commonwealth Government seems to be unwilling or unable to force the issue with the British Government and the protracted negotiations regarding improved preferential treatment as regards Australian canned fruits seem to remain "as you were."

Canada.

In recent years, Australia has developed an export trade in canned fruits with Canada. Protected by a duty on U.S.A. canned fruits, Australia was able to exploit this market fairly successfully in return for a balance of trade greatly in favor of Canada. At the moment a Trade delegation, led by Mr. McGregor, Australian Trade Commissioner in Canada, is in Australia, and conferences between the delegation and the Commonwealth Government are taking place. No result of these conferences has yet been announced, but it is stated that some advance has been made in negotiations.

The Prime Minister, Mr. Lyons, has announced his intention of renouncing some sections of the Ottawa Agreement towards the end of the year. This is a formal method of asking that certain provisions in the Agreement be reviewed. Such review will probably be made during 1938. Meantime excellent prospects of trade with New Zealand and Canada for the present year are reported.

London Sales.

Sales of new season's Australian canned fruits opened on January 25, and in the last five weeks 1,100,000 cases have been sold. This is distinctly heartening. The entire Apricot pack was practically sold out. Peaches were well ahead of expectations. 200,000 more cases of Pears were sold than in the corresponding period of last year, and there will be a very nominal, if any, carry-over in 1937. The season is certain to be good and all overseas markets should absorb 1,350,000 cases of canned Apricots, Peaches and Pears.

Factory Report

Apricots are now practically cut out except for some processing still going on in Tasmania. The season has, on the whole, been light. Pears experienced a heavy crop and a pack of 800,000 cases is confidently anticipated. Peach canning is swinging into peak production and the season will be heavier than in 1936, provided that no setback from Oriental Peach Moth is experienced. Overseas sales have been excellent and there should be no carry-over.

COMPETITION FROM JAPAN.

Pineapples and Oranges Lead.

Export Being Developed.

Japan is rapidly developing the canning of all kinds of foods. In 1935 she produced over 8½ million cases, of which fish products represented the largest proportion. Canned fruits of all kinds represented about 10 per cent. of the total.

Of all varieties, Oranges and Pineapples supply the largest production and other varieties are relatively small. In a table published by the Commonwealth Department of Commerce recently it appears that the six main lines of canned fruit products have increased in the last two years. Expressed in Australian currency, the values were:—

	1933. £	1934. £	1935. £
Jam	74,473	79.710	82,982
Oranges . . .	122,182	244,218	210,910
Pineapples . .	No records		631,055
Peaches . . .	27,927	30,036	34,910
Plums	3,273	3,491	8,727
Other	35,710	44,073	41,091

Total production of canned fruits in 1935 equalled £1,034,185 in Australian currency. The increased interest in canning fruit in Japan is ascribed to Japan's ability to establish markets in Great Britain and U.S.A.

The efficiency of the Japanese canneries is said to be astonishing. Sanitary conditions are comparable with, and better than some of the canneries in other countries. Canned Mandarin Oranges from Japan have become firmly established on the London market. The quality of Oranges is quoted as good, but that of Pineapples does not approach the standard of Australian canned Pineapples.

CANNED PINEAPPLES.

Canada Increases Imports.

An increase of over two million lbs. of canned Pineapples imported into Canada is reported for the second half of 1936, compared with the same period in 1935.

In August alone Canada took over three million lbs. of Malayan canned Pineapples, 58,000 lbs. from South Africa, 12,000 lbs. from British Guiana besides 76,000 lbs. from Hawaii. In the five months, June to November, 1936, Canada's imports of canned Pineapples touched 12 million lbs.

AUSTRALIAN CANNED FRUITS.

Research Would Give Greater Tonnages per Acre.

Preferences Under Ottawa Agreements to be Reviewed.

The Federal Government proposes to call a conference of horticultural experts later on this year to discuss phases of fruit production. The fact that production of canning fruits per acre in California is more than double that of Australia is noted. Increased production in Australia would mean greater tonnage for export, hence the necessity for reviewing the Ottawa Agreements to provide more efficient preference in U.K. markets. The present ad valorem preference is largely non-effective. These points are under consideration.

It is understood the Federal Government's plans, in co-operation with the States, include Research Stations in Victoria, N.S.W. and Queensland.

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CANNING ASPARAGUS.

Can it be Further Developed?

Advice comes that London buyers are crying out for canned Asparagus and have approached the N.S.W. Government officers in London with an enquiry as to the possibility of Australian canned Asparagus being obtained.

There has been a considerable development in the canning of Asparagus in Australia within the past few years and some excellent samples can be obtained in the stores, and the demand for such is growing every year. Up until a few years ago the only canned Asparagus obtainable in Australia was that imported from California, but so well has the industry been established that little Asparagus is now imported and the Australian production is claimed to be better than that imported.

In an effort to develop the export of Australian canned Asparagus, the N.S.W. Government has made available expert officers who are endeavoring to foster the growing of approved varieties of Asparagus, and whose advice and service can be had upon application.

This seems to be a field that has not yet been thoroughly exploited, and offers opportunity to some growers who could be interested in the commercial production of this delicacy.

PRICES OFFERED ARE TOO LOW.

English Canners' Troubles.

ALTHOUGH THE CANNING INDUSTRY in England is growing and is likely to increase still, canners complain that they cannot get the quality of fruit which they desire for canning. This is the report of Mr. E. W. H. Laxton, General Secretary of the Horticultural Traders' Association. He considers that the problem arises because the canners are not willing to pay sufficiently high prices to the growers. There seems to be a disposition, on the part of the canners, to increase future prices for first-class fruits.

He further urges that steps be taken to create a greater demand for Blackberry products, pointing out that these berries are easy to grow, that there are certain varieties that are eminently suitable for canning, and that this field is very favorable for exploitation to the mutual benefit of both growers and canners.

THE SOUTH AUSTRALIAN FRUIT MARKETING ASSOCIATION INC.

The monthly meeting of the executive of the S.A.F.M.A. was held at Adelaide on February 26. The President, Mr. H. J. Bishop, occupied the chair. Present, Messrs. H. J. Bishop, P. R. B. Searcy, R. Hannaford, E. S. Mason, J. B. Randell, A. C. Strickland, A. O. Petersen, F. B. James, M. G. Basey. Apologies were received from Messrs. J. S. Hammat, H. N. Wicks, F. Redden and A. R. Willsmore.

Correspondence: Letters from Royal Agricultural and Horticultural Society of S.A.:—

Dated February 18, asking that the Association donate the Special Prize for Class 1784 again this year. It was decided to give the cup as usual.

Letters from Australian Apple and Pear Export Council in regard to inclusion of the Pear variety "P. Barry," also giving extra cost of printed wrappers.

It was agreed that Messrs. H. J. Bishop, M. Vickers, G. A. W. Pope, H. N. Wicks and P. R. B. Searcy, be appointed as a Committee to choose a design for a printed wrapper for Apples and Pears.

Note to be sent to Mr. W. Gregory, of Gerrard Wire Tying Co., thanking him for his parcel of labels and stating that we hope that we can co-opt. his services in the selection.

Advising that fruit for the Continent per U.K. ports, for which evidence from the consignee is produced indicating that he will take delivery at a Continental port will not be counted in the U.K. quota.

Letter from Mr. A. G. Strickland in connection with the matter of preventing the sale of immature fruit. It was resolved that special provision be made for early cooking Apples. Mr. Strickland agreed to insert same in the Act.

Letter from Liberal and Country League referred from last meeting. It was resolved:—

"That Mr. Playfold and Mr. Randell be our delegates to Liberal Convention."

Field Day: Mr. Randell reported that we record our appreciation of the interesting day we had at the field day.

Export Fruit: Mr. Strickland advised that the inclusion of the date of picking would be placed on the certificate for export on account of Czecholovakia not wanting fruit picked longer than six months, which would be purchased through London.

It was decided to hold the next meeting on Friday, March 19.

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Western Australia:
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South Australian News and Notes

S.A. Fruitgrowers' and Market Gardeners' Association

Monthly Executive Meeting

THE February executive meeting was held on 26th of that month, when Mr. Norman T. Hobbs, the Association President, occupied the chair. The following members attended: Messrs. G. H. Schultz, H. B. Gibson, G. H. Parsons, G. Jennings, F. Hughes, J. Turner, M. Vickers, C. Bridley, R. Hunter, A. O. Petersen, J. Randell, L. J. Wicks, F. G. Gill, W. J. Bishop, E. Giles and R. Hannaford. Apologies received from Messrs. Stanford, Makereth, Gibson, Cramond, C. W. Giles, and Strange.

Minutes as sent out to members were taken as read and confirmed.

A letter had been received from the Minister of Agriculture, stating that it was not possible to sanction the appointment of an additional inspector to the staff of the Department as recently requested by the Association.

A letter from the Produce Export Department containing data re the sale of Celery and Cherries on the English market, was referred to the respective sections concerned.

Messrs. Ridley and Houlding, of London, wrote requesting that supplies of South Australian Apples and Pears be consigned to them this season, which they predicted to be a good one for Australian Growers.

Letter received from Murray River Wholesale Co-op. Ltd., strongly advocating a "Yes" vote, on the forthcoming referendum. The letter was discussed by several of the members present, but no definite action was decided on.

Mr. A. G. Strickland, the Chief Horticultural Instructor, wrote setting out proposed regulations regarding the sale of immature fruit. The suggested regulations are as follow:

Part I.—Definitions

Include—

"Mature in relation to Apples, Apricots, Nectarines, Peaches, Pears, and Plums means that the fruit has reached that stage of maturity which will ensure normal completion of the ripening process."

Part II.—General Requirements

Include—

"No person shall sell any Apples, Apricots, Nectarines, Peaches, Pears, or Plums which are not mature as defined."

A motion approving of the proposed regulations was carried unanimously.

Mr. J. Turner, chairman of the S.A. Fruitgrowers' Fruit Pool Society, reported that a serious glut of Plums was now being experienced in the market, and a fortnight ago it was decided, if possible, arrangements be made to conduct a Plum Pool. He stated that the position was very serious, and it was absolutely necessary to make some move to relieve the market. The Secretary reported that he had applied for assistance to finance a pool, to the Commonwealth Bank, but the bank has refused the application.

Mr. F. Hughes reported that a subcommittee had met to discuss a scheme, whereby it might be possible to adopt some better system of bocking, than that operating in the market at present. Several suggested systems had been considered, but as yet nothing definite had been done.

Secretary reported that he had written the Potato Advisory Council stating that it would not be possible for this Association to send a delegate to the meeting to be held in Melbourne.

Secretary stated that Cherry consignments had been finalised, and a little profit was in hand from Melbourne Levies and Adelaide Factory Refunds. Mr. W. J. Bishop thought it was an imposition that the S.A. Railways should charge to open the gates to allow Sunday loading, as this was most necessary for the fruit to land in good condition on the Melbourne market, and the loading was not done by the railways. Mr. F. Gill moved "That matter of charging for Sunday loading, be referred to the Tomato and Cherry Section." Seconded by Mr. Randell and carried.

The date of the first Quarterly Educational Meeting was fixed for Wednesday, March 17, and the Secretary urged every member present to come and induce fellow growers to attend, as these meetings promised to be of considerable importance to the whole industry. The speaker for the first meeting would be Mr. A. G. Strickland, who had chosen as his subject: "Factors Affecting Fruit Setting."

The Royal Agricultural and Horticultural Society wrote requesting the Association to continue their presentation of two trophies each year. It was decided that the Association again donate two prizes for Apple Packing at the 1937 Royal Show.

Secretary read list of quantities being held in the various cool stores in different States. It was decided that we write the Department of Agriculture requesting that, if possible, a list of cool store quantities be compiled mid-monthly for consideration at the S.A. F. & M.G. Association monthly meetings, as the information would then be of increased value.

NOTICES.

Executive Meeting.

The monthly meeting will be held at the Association's Board Room on Friday, March 19, 1937, at 10.30 a.m.

Business.

Important matters will be discussed in addition to Receipt of Reports from Sections.

(Please note the date of meeting.)

N. T. HOBBS, President. M. KIMBER, Secretary.

MARION BRANCH.

The usual monthly meeting will be held at Sturt Hall, on Wednesday, April 7, 1937, at 8 p.m.

All members invited to attend.

I. R. ADAMS, President. J. R. DUNCAN. Hon. Sec.

Presentation to Mr. Reg. Stanford

MR. REG. B. STANFORD, of Fulham, has a very fine record in connection with the Tomato Growers' Section of the Association. In the early part of October, 1926, there was much dissatisfaction among growers with the price merchants were paying them for Tomatoes intended for export to Melbourne, and a hurriedly called meeting was attended by over 50 growers who protested very strongly. Mr. Stanford was present, and quoted very informative figures, comparing prices received by those who had sold on consignment, and those paid in Adelaide.

From this time there was a large increase in the quantity of Tomatoes sent to Melbourne on consignment, and committees were elected by the growers to meet the Adelaide merchants frequently to fix the Adelaide price, which was to be based on that of Melbourne. This was sent to the Association by Mr. C. W. McRostie, who had been appointed as representative of the Tomato growers. This method of fixing prices proved far from satisfactory, and entailed considerable loss of time by growers' committee and that of merchants. Mr. Stanford acted on the committee for several years, rendering good service to his fellows in a very difficult task.

Price-fixing in consultation with merchants having been discontinued, the Tomato Section decided that the stabilising of prices should be attempted by growers themselves. Mr. Stanford was appointed convenor, and he then, after conferring with other growers interested in the price, issued a price ticket each market morning which was delivered to all Tomato growers before the commencement of the market. This service has given general satisfaction, and growers decided that they would show their appreciation by making a presentation to Mr. Stanford, of a very handsome writing desk.

This was done on February 12, when several growers testified as to the great assistance Mr. Stanford's work had been to the Tomato growers generally. In acknowledging the presentation of such a useful gift, Mr. Stanford bore testimony to the value of the Association's desire to help all growers of any kind of produce if the "growers themselves would assist themselves," and co-operate in effort to obtain a reasonable paying price for their produce.

Mr. Stanford had four years active service in the Great War, a fact much

Mr. Reg. B. Stanford, Fulham, S.A.

appreciated by his fellow growers, in addition to the appreciation of his efforts on their behalf in the Tomato industry.

EXPORT OF CITRUS FRUIT TO NEW ZEALAND.

South Australian citrus growers will have noticed with satisfaction that Mr. Savage, Prime Minister of New Zealand, had informed a South Australian party of farmers, now on a visit to the Dominion, that there was not the slightest possibility of South Australian Orange shipments being decreased, and there was a strong likelihood of greater shipments being permitted in the future. Although there had been an increase in planting, it would be many years before they had much effect on the total production.

Owing to great scarcity of citrus fruit in New Zealand recently, some had been allowed entry from certain areas in New South Wales, which were guaranteed to be free from fruit fly. He was inclined to believe the fruit fly and "corky scab" scares to be myths.

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FRUITGROWERS' AND MARKET GARDENERS' SOCIETY.

The monthly meeting of the Committee of Management of above Society was held on 26th February, when Mr. F. C. Staniford, presided and following members were present — Messrs. L. J. Wicks, N. T. Hobbs, W. Nicol, W. J. Bishop. Apology received from Mr. A. Day.

The Secretary reported having attended a meeting of Stareholders of Murray River Wholesale Co-operative Ltd., at Renmark on 22nd. February. There was a very representative attendance, and the Report and Balance Sheet revealed that a prosperous year had been experienced.

Mr. W. Field, acting manager of the Society, reported that there had been a steadv increase in business and further efforts were about to be made to give better service on market days to our shareholders, who number 425, and were being constantly added to as the benefits to be derived by purchasing their requisites through the Society became known.

ELECTION OF TOMATO SECTION COMMITTEE.

The Tomato Section Committee consists of twelve members, six of whom retire annually, when nominations are called to fill their places. Mr. Frank Steward, who has been a member for several years, did not seek re-election, as he believes that it is an advantage to include some fresh men occasionally. His services have been much appreciated by his fellow growers.

Seven nominations were received, and the ballot resulted in the following growers being elected for two years:— Messrs. M. Dawkins, R. Stanford, A. F. Huelin, A. Elliott, H. A. Weymouth, and W. Parsons.

The Committee, while appreciating the confidence shown in them by the growers generally, regrets that such a small proportion of them take the trouble to exercise their vote at the annual election. The great success of the section, during nearly ten years of its existence, has been attained by the fine work of its Committees in the face of much opposition in some quarters, and apathy on the part of some growers.

Price-fixing by Ticket in the Adelaide Market

During 1936 and 1937 many reforms have been adopted by the Association for the betterment of the whole fruit industry, and perhaps the best known is the price-fixing in the Adelaide market by means of a price ticket, being delivered each market morning to growers. Prices this year have been fixed on Peaches, Apricots, Nectarines and Tomatoes.

Three years ago the Tomato Section Committee decided that steps should be taken to stabilise the price of Tomatoes on the Adelaide market, and after considerable discussion, it was decided that the price should be fixed by a small committee of growers each morning, and then made known to each grower. When this scheme came into working there were many who doubted its effectiveness; but after a short while growers soon realised that they now had a chance to control the price according to the supply and the demand.

During this soft fruit season, the Soft Fruit Section Committee also realised that something should be done to effectively control the prices of Nectarines, Apricots and Peaches, and decided to adopt a system similar to that operating on Tomatoes.

The price placed on the ticket delivered to growers is the minimum, and all growers are urged to strictly adhere to this price. Unfortunately the various quality of fruit coming into the market often presents a big problem to the price-fixer; but before the price is fixed everything is taken into consideration as to weather, supply, and quality.

The old, old tale still prevails though: "What's the good of me trying to get the price, because I know Mr. X is selling under." Well, the only advice to growers uttering this statement, is to sell on ticket price and disregard Mr. X's marketing methods, as he will soon realise that if majority of the growers are getting the price fixed, he could also get it, and it won't take long for him to come into line.

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DEVOTED EXCLUSIVELY TO THE
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Field Day at Blackwood Orchard

THERE was a very representative gathering present on February 24 at a Field Day at Blackwood Experimental Orchard, arranged by the Local Branch of the Agricultural Bureau, and the Fruit Marketing Association. Mr. H. J. Bishop, President of the latter, in welcoming the visitors, bore testimony to the value of the orchard to the fruit industry, and the readiness of those in charge to assist growers in any way possible.

Mr. R. Fowler, manager of the orchard, then took the party through, and drew attention to many of the experiments which were being made, which would be tabulated carefully, and made available to those interested. Special attention was drawn to the fact that trees which had served the purpose for which they were planted, were being replaced by others which would be more likely to be of commercial value. Much interest was shown in various grafts which had been successfully used in working over Apple trees to varieties much superior to what they were formerly, with very little loss of time. Apricot growers were informed of the experiments which were being made to prevent "die back," which has proved so disastrous in many districts.

The result of manurial experiments with Apple trees, seemed definitely to prove the benefit of ammonia both to fruit and foliage.

Mr. A. G. Strickland, Chief Horticultural Instructor, impressed upon the Apple growers present the need of complying with the grading regulations now in force, and thus further increase the good reputation gained to some extent during last season. The inspectors had a difficult task to perform, but growers must realise that regulations must be enforced, and thus growers should exercise the greatest care in supervising the grading and packing. He drew attention also to regulations dealing with maturity, color, and damage caused by hail, etc.

After partaking of afternoon tea, Mr. Goldsack, Chairman of the Bureau, welcomed the Hon. A. P. Blesing, Minister of Agriculture, and expressed appreciation of the very keen interest he took in the welfare of the fruitgrowers. Mr. Blesing stated that he felt sure that the experimental orchard was of great value, and that so far as funds permitted, the Government would assist those in charge in their work. He hoped the Branch of the Agricultural Bureau would continue its activities, as he believed that by closer co-operation much benefit would result.

Mr. Strickland drew attention to a machine which had been made by which the arsenical spray residue could be removed from Apples, efficiently and cheaply. He thanked Messrs. Lanyon & Son for constructing the machine, which was shown in operation. It certainly made a good job quickly, and the machine could be made by any grower handy with tools.

The Torrens Valley Show

The 16th annual show was held at Paradise on Saturday, February 13, in rather unfavorable weather, which affected the attendance. Competition in the classes for fruit and vegetables was in most cases very poor, which is a matter which causes much regret, when the wonderful fertility of the famous Torrens Valley is considered, with its great variety of produce grown. It was rather too early for some varieties of fruit, but Peaches were in fine order, some being of outstanding merit. Mr. W. Boehm, of Uraidla, staged a very fine exhibit of vegetables, and took the majority of prizes in his individual entries.

The following is the list of prize takers in fruit and vegetable classes:

Fruit.

Collection of fruits, Hann Bros. (1 and 2). Twelve varieties of Apples, H. S. Hobbs. Six varieties of Apples, export, A. Rehn, H. S. Hobbs. Dessert Apples, A. Rehn (2). Cooking Apples, A. J. Hann. Collection of Pears, A. J. Hann. Dessert Pears, A. J. Hann (1 and 2). Cooking Pears, A. J. Hann. Twelve Figs, R. Hart, W. Stone. Lemons, A. Rehn, N. C. Church.

Twelve Peaches, A. J. Hann, G. Pitt. Six Peaches, G. Pitt, A. J. Hann. White Freestone Peaches, W. Stone, L. G. Cronz. Yellow Freestone Peaches, A. Hobbs, N. C. Church. Clingstone Peaches. A. E. Hill, G. Pitt. Nectarines, W. Stone, A. J. Hann. European Plums, A. J. Hann (1 and 2). Japanese Plums A. J. Hann (1 and 2). Dish of European Plums, A. J. Hann (1 and 2). Collection of Tomatoes), A. Rehn (1 and 2). Tomatoes on plate, A. Millar (1 and 2). Soft shell Almonds, W. Stone, A. Rehn.

Vegetables.

Collection of vegetables, W. Boehm. Canadian Beans W. Boehm, (1 and 2). Beans, any other varieties, E. Possingham. Long Cucumbers, W. Boehm. Apple Cucumbers, W. Stone (1 and 2). Any other type of Cucumber, W. Boehm. Gherkins, W. Stone, W. Boehm. Egg Fruit, W. Boehm (1 and 2). Cauliflowers, W. Boehm (1 and 2). Cabbage, W. Boehm (1 and 2). Red Cabbage, W. Boehm (1 and 2). Short Carrots, W. Boehm (1 and 2). Long Carrots, W. Boehm (1 and 2). Parsnips, W. Boehm (1 and 2). Turnips, W. Boehm (1 and 2). Swede Turnips, W. Boehm (1 and 2). Red Beet, W. Boehm (1 and 2). Green Peas, W. Boehm (1 and 2). Rhubarb, W. Boehn (1 and 2). Lettuce, W. Boehm (1 and 2). Celery, W. Boehm (1 and 2). Largest Watermelon, W. Farnham, R. Heading. White Watermelon, H. Heading (1 and 2). Green Watermelon, Hann Bros., H. Heading. Any variety of Watermelon, H. Heading. Sweet Melon, yellow, Hann Bros. Green Sweet Melon, C. Harris, A. J. Hann. Carmen Potatoes, W. Boehm (1 and 2). Potatoes, W. Boehm (1 and 2).

White Onions, W. Boehm, N. K. Blesing. Brown Onions, W. Boehm (1 and 2). Pickling Onions, P. K. Blesing, C. Marchant. Bottle Pickling Onions, P. K. Blesing, W. Boehm. Turk's Head Pumpkins, C. Emery, W. Boehm. Pumpkins, W. Boehm (1 and 2). Marrows, W. Boehm. Straight Trombones, W. Boehm, P. Gauci. Curved Trombone, P. Gauci. Heaviest Trombone, P. Gauci, W. Boehm.

There was a very fine display of horses in action and some exciting finishes were witnessed.

Messrs. G. Hann and A. Floyd acted as Secretary and Assistant Secretary respectively, and were most efficient in their many services.

The low Baumé density of Grapes sent to River Murray (S. Aust.) distilleries is causing considerable concern to producers and wine makers. An overhaul of the manurial programme is advocated.

South Australia
MID-MURRAY NOTES

Hot Weather Needed for Drying Vine Fruits — Heavy Crops of Duchess Pears for Canning and Drying — Problem of Low Sugar Content of Grapes and Relation to Manurial Practice.

Renmark, February 22, 1937.

THIS SEASON, 1936-37, commenced with an evil repute by devastating frosts in many localities, and although major fungoid diseases and pests have left us pretty well alone, the weather conditions during January and February have not been kind. One monsoonal depression after another came along, bringing sometimes an inch of rain, sometimes a half, and another time a quarter; but nearly every time the depression was followed by humid conditions, which have had a harmful effect on the maturing fruit.

Currants, however, are carrying an abnormally heavy crop, and drying racks are rapidly filling. Whether we get the crop now showing on the vines will depend on the weather during the next month or so.

The Summer has been a very wild one, and consequently both **Currants** and **Sultanas** have been late in maturing. In fact picking is a fortnight to three weeks later than last year, and even at this date, Currants are not fully sugared, but any further delay in picking will mean so much later in the drying period, with a danger of encountering an early break in the season which would necessitate dehydrating the later picked fruit.

The **Sultanas** are abnormally slow in sugaring this year and last week's quarter of an inch of rain, accompanied by extremely humid conditions caused a certain amount of splitting of berries and a complete breakdown of many of those compact bunches of immature fruit. This has caused us a good deal of anxiety.

The Duchess Pears have all been harvested, and resulted in an exceptionally heavy crop. At the last moment the Adelaide canneries decided to operate on a limited scale, which left the majority of the crop for drying purposes. The improved quality of our dried Pears in recent years has earned a good reputation on the overseas market, and we are assured that, given the usual quality of our fruit, there will be a ready sale.

The later varieties of Grapes, such as **Gordos and Doradillos**, have not yet been affected by our adverse weather conditions, but we badly want a month of good honest hot weather.

Just at present our thoughts are dominated by the possible result of the **Referendum** on March 6. Local committees have been formed in all River towns, who are working hard for a "Yes" vote. Public meetings have been carried out at all River towns by Senator McLeay, Mr. T. Stott, M.P., and Mr. Basil Harford in the interests of our "Yes" campaign. The welfare of the dried fruits industry depends on the successful issue of the Referendum and by the time this reaches the readers our fate will be known. My personal belief is that the average Australian has a strong sense of fair play, and will think nationally.

On February 9, the Renmark North and Chaffey Agricultural Bureau held a meeting. Mr. Len Moss took the chair. Mr. Karl Wiedenhoffer (technical manager and wine maker at the Renmark Growers' Distillery), read a paper on **"Sugar Content and Manurial Practices,"** which proved to be a paper of outstanding merit. Mr. Wiedenhoffer attacked a problem which has exercised the minds of growers for a considerable time; that is, how to increase the Baumé density of our fruit to keep pace with increasing crops.

2. Climatic and seasonal conditions.
3 Effect of irrigation.
4. General habit of vine and cultivation.
5. Manurial requirements of the vine.

1. Refers mainly to the climatic situations, such as the difference between Northern and Southern France and does not concern us greatly.

2. It has been estimated that the Grape requires an average temperature to reach full maturity, and should this rise or fall there is likely to be a variation.

3. Irrigation has a definite effect on Baumé readings, just as rain has, and particularly so when close to picking time. The speaker thought that if irrigation water could be withheld during late Spring to make it almost suffer, it may have the effect of going through a hardening process to toughen it up.

Touching on the **manuring** side, Mr Wiedenhoffer thought that the modern practice of growing **cover crops** in every row, besides using additional nitrates in the form of sulphate of ammonia, had the effect of producing rampant growth and sappy fruit, which is subject to attack by fungoid diseases and rain damage.

The speaker strongly advocated the liberal use of phosphates and potash to establish a balance for the nitrates produced by yearly cover crops, and gave the following results of a nine years' manurial test of a block in phosphate dressing should be used with the cover crop, and the rest down the bottom of the ditched row carrying vine cuttings.

A good deal of discussion followed Mr. Wiedenhoffer's interesting paper, in view of the fact that growers are genuinely concerned about the inability to get the high Baumé tests of former years when crops were lighter.

The present position seems to be that we cannot have it both ways, and must content ourselves with a moderate crop of highly sugared fruit, or a big crop of low Baumé fruit. Mr. Wiedenhoffer's opinion as a wine maker unhesitatingly advocates a moderate crop with fruit of a high sugar content.

Mr. Bruce Davies moved a vote of thanks to the speaker, and said that the extra 2 or 3 degrees Baumé was what the grower was looking for, and Mr. Wiedenhoffer had given us some data which might lead to the way of getting it. Mr. F. Hooper, in seconding the motion, said that science might help us in our problem, because the layman had failed to get the desired result of a high Baumé with a big crop. Mr. Wiedenhoffer, in thanking members, thought that a great deal could be accomplished by a close co-operation between our scientific friends, and the practical man by pulling together, he considered it a big problem, but that it should not be insurmountable.

"NEMO."

	No Fertiliser.	Sulphate of Ammonia. 2 Cwt. per Acre.	Superphosphate 4 Cwt. per Acre.	2 Cwt. Super. Sulph. Ammonia 1 Cwt. Sulph. Potash 1 Cwt.	Sulph. Potash 1 Cwt.
	T. C. qr. lb.	T. C. qr. lb.	T. C. qr. lb.	T. C. qr. lb.	T. C. qr. lb.
Tonnages	5 19 2 4	6 17 0 11	6 17 1 15	7 0 3 13	6 12 0 9
Monetary return per acre	£32 18 5	£38 13 1	£39 15 6	£40 12 11	£37 18 9
Lbs. of Wood Prunings	15¼ lbs.	31 lbs.	26 lbs.	30 lbs.	25 lbs.
Baumé Strength	13.8	13.9	14.5	14.2	14.2
Cost of Fertiliser Freight, Cartage, etc.	Nil	£1 11 10	£1 5 4	£2 4 10	£0 16 9
Monetary Return less Cost of Fertiliser Cartage, etc.	£32 18 5	£37 1 2	£38 10 2	£38 8 1	£37 1 11
Increase with Return per Acre over non-manured Plot	—	£4 2 9	£5 11 9	£5 9 8	£4 3 6

Our cultural methods which have been adopted in the past few years have shown definite increases in tonnages, but a corresponding decrease in Baumé density of the fruit delivered to the distillery. The speaker said, "Growers generally know that each year there are many queries regarding Baumé tests when delivering to the winery or distillery. They do not perhaps realise that almost each year since 1927 there has been a steady decline in the average tests taken in each variety of grapes. So much so that the position is becoming alarming. Summarising the factors, influencing Baumé density, the speaker gave the following reasons for variations:—

1. Situation of vineyard, geographically or otherwise.

Griffith, N.S.W., the results of which were published in the "Australian Wine and Spirit Journal."

Mr. Wiedenhoffer's comments are that the Baumé strength of both the superphosphate and complete manures are higher than the check plot, and the sulphate of ammonia plot, and he believed that the superphosphate amount could with advantage be increased up to 6 cwt. per acre and the sulphate of potash up to 1½ cwt., and strongly urged all growers to make test plots on their own property. On no account were they to give up their green manuring policy, but sulphate of ammonia should only be used in places where sub-normal growth was produced. Sulphate of potash, he thought, should be applied in early December, but a portion of the super-

ORIENT LINE APPLE EXPORT TROPHY.

Apple growers generally appreciate the generosity of the Orient Line in again presenting a Cup for competition in Apples for export at the Royal Show in September of this year. It is pleasing to notice that the interest in this very important matter is steadily increasing, with keen competition. Growers are reminded that entries must be in by April 15, 1937, and exhibits delivered to the Government Produce Department. It is an honor to win the trophy, and to win it in face of keen competition adds greatly to the honor; therefore make up your mind to compete, and do your very best to comply with the regulations governing the competition.

Best Market Prices

PROMPT SETTLEMENTS

I. Friedmann

FRUIT DISTRIBUTOR,
LONDON
20 BEDFORD CHAMBERS,
COVENT GARDEN.

Large Clientele for Dried and Canned Fruit.

"HILLMAN" ORCHARD STRIP PLOW

Double Furrow

A sturdy, strong plow equipped with reversible discs to enable the operator to plow up to, or away from the trees. Operated by a single lever and with nothing to catch branches of trees. To facilitate the movement of the plow around the orchard the discs are movable and lift clear of the ground.

The steering arms are drop forged from the best mild steel and the main wheels are equipped with ball bearings.

Two medium horses can work this machine all day without tiring. A machine may be obtained for a trial at any time.

Further particulars apply . . .

HILLMAN & KEOGH

Implement Manufacturers

Shipley Street, Box Hill, Melbourne, E.11

The Removal of Spray Residue from Apples and Pears

By A. G. Strickland, M.Agr.Sc., Chief Horticulturist, and R. Fowler, Manager, Blackwood Experimental Orchard, in the "Journal of Agriculture," South Australia.

(Continued from February Issue.)

Equipment and Materials.

Hand washing with hydrochloric acid may be performed in wooden troughs (or even half casks) adapted to suit the particular requirements of individual growers; the troughs may be designed to take one case of fruit at a time, or lengthened to take a number of cases, which are floated through the trough at a rate consistent with the immersion of the fruit for the required period.

Two troughs are necessary—one for acid treatment, the other for rinsing after treatment—and these must be constructed of wood or other acid-resistant material. A draining board is required between the acid and rinsing trough (sloping to the acid trough), and another at the exit end of the rinsing trough.

The acid trough should contain a solution of 1 gall. to 3 galls. of commercial hydrochloric per 100 galls. of water—the strength of acid being varied within the above-mentioned range according to the density and tenacity of the residue to be removed.

The rinsing trough must be of at least the same capacity as the acid trough, and equipped to permit of a constant change of rinse water; this may be achieved by entering water through a hose used for douching of cases on the final draining board, and providing an overflow outlet at a convenient height.

The Washing Solution.

Commercial hydrochloric acid (S.G. 1.2) at the rate of 1 gall. per 100 galls. of water will remove most residues. Particularly resistant residues resultant upon use of oil sprays, or such as are found on certain waxy varieties of Apples, or upon fruit which is held for some time before washing, may require up to 3 galls of commercial acid per 100 galls of water. The lowest strength of acid consistent with efficient removal should be used.

Hydrochloric acid will attack metals, clothes, etc., and great care is necessary in handling, particularly the concentrated form. Earthenware or wooden containers should always be used, and a supply of concentrated baking soda solution kept at hand with which to neutralise any strong acid splashed on hands, face, etc.

As fruit passes through the acid trough, gradual loss of solution will take place—this loss should be made good from time to time with solution of the correct strength. Besides loss of acid solution through splashing, absorption by cases, etc., the actual strength of the solution decreases after a considerable quantity of fruit has passed through. This decrease in strength will be evidenced by failure of the bath to remove residue effectively, and under such circumstances, small quantities of undiluted commercial acid may be added to bring the bath back to the stage where it again becomes effective. Usually, however, it will become necessary, on account of other considerations, to entirely replace the acid bath by fresh solution before it loses appreciably its powers of residue removal. As fruit passes through the bath, dirt, rubbish, and—more important—mould spores accumulate in the acid solution; an appreciable concentration of mould spores is highly underisable, and it is recommended that the acid wash solution be renewed completely after washing 1,000 cases of fruit per 100 galls of solution.

Rinsing Water.

The essential feature here is that continuous change of water should take place, and failing a constant water supply on the site, the orchard spray cart can be often adapted to provide running water. For treatment of varieties with open calyx tubes, such as Cleopatra, it is recommended that the rinsing water be charged with 10 lbs. of slaked lime per 100 galls. of water; in such case the rinse water will not circulate. Whether the rinsing trough contains circulating fresh water, or (as in the case of varieties prone to open calyx tubes), lime water, a final douche from a hose is essential.

Containers for Fruit.

Fruit should be passed through the baths in cases which have sufficient space between boards to enable rapid and complete drainage; for this reason, certain types of kerosene boxes are unsuitable.

Apples which have definitely closed calyx tubes (e.g., Jonathans, Granny Smith, etc.) and Pears may be conveniently washed in dump boxes or kerosene boxes, provided that the latter are remodelled to give quick drainage.

Apple varieties with open calyx tubes (e.g., Cleopatra, Delicious, London Pippin) must not be immersed deeply in the acid bath, and therefore dump or kerosene cases are unsuitable for washing such varieties. Flat cases, such as the long bushel Pear case used on the side, must be used for these varieties, the aim being to avoid submersion of the bottom layer of fruit to a depth exceeding 6 in.

Loose-fitting lids, either lightly nailed or otherwise temporarily affixed to cases are necessary to prevent Apples from floating out of boxes whilst in the acid or rinse trough. Most varieties of Pears are heavier than water, and lids are not required for boxes when dipping such fruit.

Procedure.

Fruit should be washed as soon after picking as possible, owing to the fact that in the course of time a protective coating of wax is developed by many varieties; this coating impedes the action of the acid, and makes cleaning very difficult. All decayed and bruised fruit should be excluded from cases which are to pass through the bath.

The period of immersion of fruit in the acid solution (1 per cent. to 3 per cent. according to type of residue being dealt with) should be approximately two minutes. Up to four minutes' exposure to 1 per cent. acid is quite safe, but in order to speed up the rate of treatment it is usually preferable to fix on a period of two minutes' exposure, and increase the strength of acid as required up to a maximum of 3 per cent. Where troughs of more than one case capacity are utilised, a system can be worked out whereby each case spends the allotted time in the acid bath between entry at one end and removal to the centre draining board at the other. Cases should be gently plunged up and down whilst in the solution. Reference has already been made to the necessity of using shallow boxes or trays, and avoiding deep immersion for Cleopatras, Delicious, and other open calyx-tubed varieties.

After removal from the acid bath the fruit is allowed to drain for a short time on the centre draining board before entering the rinsing trough. In the rinsing trough the cases are vigorously plunged up and down before proceeding in due course to the final draining board, where they receive a final douche of water from a hose.

The necessity for adequate rinsing of fruit after acid treatment cannot be overstressed. Provided that rinsing is thoroughly carried out (and open calyx-tubed varieties of Apples not dipped deeply), the method of residue removal under consideration cannot harm fruit in any way. However, if rinsing is negligently performed, injury to fruit can occur.

From time to time the efficiency of rinsing should be checked by the simple procedure of applying the tip of the tongue to the calyx cavity of a number of fruits as they leave the final rinse. If a sharp, stinging sensation is experienced on the tongue this may be taken as an indication of insufficient rinsing.

As previously mentioned, Cleopatras and other open calyx-tubed varieties should be **shallow dipped** in acid and **deep dipped** in a rinse bath containing 10 lbs. hydrated lime per 100 galls. of water. Where the lime water rinse is used, douching with running water from a hose will effectively remove any lime carried over on the surface of the fruit.

Special provision for drying is not necessary, the average temperatures and humidities experienced in South Australia during the harvesting period being generally such as to ensure rapid drying of the fruit.

RED GRANNY SMITH APPLE!

Surprising Development in N.S.W.

A RED Granny Smith Apple is reported as having been produced by plant-breeders at the Bathurst (N.S.W.) Experimental Farm.

Experimental work that has been going on for many years at Bathurst has at last met with a measure of success at the hands of the young plant-breeders, Messrs. Dwyer and Ballantyne.

The manager of the Bathurst Experiment Farm, Mr. May, has issued the warning, however, that no buds, budding wood, or trees of this variety would be available for some years.

South Australian Cold Stores Ltd.

APPLE AND PEAR STORAGE.

EXPORT FRUIT RAILED DIRECT TO SHIPS IN INSULATED VANS

CENT. 3030. **MILE END, S.A.** CENT. 3030.

PATENTS

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Fruit Trees

In All Varieties, Specially Raised and Cultivated for the Needs of the Orchardist.

RELIABLE ALMOND TREES... Best Commercial Varieties.

ROSES, PLANTS AND SHRUBS of Dependable Quality Always Available.

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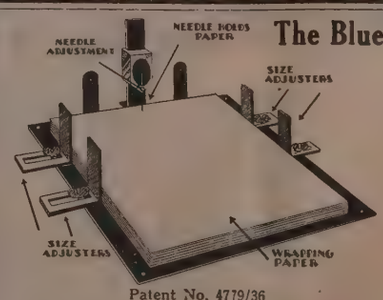


Patent No. 4779/36

The Bluemoon "Fastpak" Paper Holder

— Fruit Wrapping —

REMARKABLE for the speed and smoothness with which the paper may be drawn from the container.

NO WASTE—the needle-point control ensures that there is no waste or unsightly torn corners.

ADJUSTABLE to take various sizes of paper.

DURABLE—it will give years of efficient service without any cost for replacements.

FAST to work with and definitely improves packers' tallies — at the same time prevents the paper from shifting or buckling in the container.

Southern Victoria Pear Packing Co. Ltd.

Blackburn - - Victoria

Enquiries invited from Victorian and Interstate Packing Houses regarding District Agencies.

Has been tested and proved under working conditions.

TRADE WITH THE EAST

DELEGATION'S REPORT

Quality and Form Important

WITH A DESIRE to investigate and create further outlets for Australian exports, the Commonwealth Government has been exploiting possible new avenues, and in 1935 and early 1936, despatched trade delegation to investigate marketing opportunities in India, Burma Ceylon. The delegation consisted Messrs. R. F. Sanderson, J. Thomson, representing secondary and primary industries, and S. F. Lynch, of Department of Commerce.

Their report was released by the Prime Minister in October, 1936, and now available to the press. It covers exhaustively all information relative to the countries concerned and covers 173 foolscap pages of print. The delegation worked in conjunction with Australian Trade Commissioners, merchants, Government representatives and others and studied every style of commerce likely to have a bearing upon their mission. The report points out that the study of conditions had, perforce, to be limited and rather cursory, therefore the information gained and the contacts made are to be considered in the nature of a preparation for follow-up negotiations by Australian exporters representing the various commodities which this country has to offer.

Fall in External Trade.

In a foreword, the report instances a marked decrease in Australia's total external trade from £306 million in 1925 to £154 million in 1933. Represented per capita, Australia's external trade decreased 53 per cent. the period quoted as compared with Great Britain 43, America 57, Japan Germany 43 and France 36 per cent.

External trade, in this instance, applies to exports and imports combined. In 1925 Australia's imports were £157 million, and exports £161 million, but by 1935 these figures had fallen to £74 million and £90 million respectively. In percentages, imports fell by 44 per cent. and exports by per cent. in the period quoted. Although there was a lowering from 25 to 1930, the greatest decreases have occurred in the last five years, during what is known as the depression years. In 1935, however, imports began to rise by £6 million over the previous year, whilst exports declined £8 million, showing that with the gradual improvement in buying power in Australia, there was not a similar improvement in export trade.

Production and Exports.

A further study of the report reveals that whilst Australian production in 1925 was worth approximately 54 million, of which she consumed 93 million and exported £161 million, in 1934 her production had dropped to £354 million, of which £231 million represented home consumption and £123 million went for export. Following this ratio, the chief exports are given and show the fluctuations that have occurred between 1925 and 35. Expressed in thousand pounds:

	1925.	1935.
Wool	63,258	39,263
Wheat	34,613	11,612
Dairy Products ..	10,840	11,952
Meats	6,912	8,747
Fresh Fruit	1,089	1,821
Canned Fruit	—,427	—,997
Dried fruit	1,930	2,165

It will be seen that all fruit exports have increased, although wool and wheat have both greatly decreased.

Area and People.

Although not indicative of the actual markets represented by the millions of people within easy reach from Australia, the report records the following as part of the general information covered:—

	Area.	Population.
India (sq. miles)	1,805,332	320,000,000
Burma	262,000	15,000,000
Ceylon	25,332	5,000,000

These enormous populations, however, do not represent potential purchasers of Australian goods for, as is known, the poorer classes in all countries visited can never expect to consume any imported goods. The potential market is therefore totally restricted to Europeans and well-to-do natives, the proportion of whom, in comparison with the total population, is very small indeed. For instance, the 1931 census showed that there were only 330,000 Europeans and Anglo-Indians in India. With the addition of those well-to-do Indians who have adopted, more or less, Western customs, the number of potential customers for imported goods is very limited. Burma has approximately 30,000 European and Anglo-Indian residents, whilst in Ceylon, counting European, Eurasian and wealthy native residents, the potential customers for imported goods can be estimated at about 100,000 people.

Competition.

Whilst these numbers alone would seem to indicate that they provide a sufficiently interesting market for Australian goods, it must not be forgotten that already other foreign countries are strongly represented in the marketing of similar goods to those available from Australia, that such foreign countries have developed contacts with European and native distributors, have arranged financial clearances and are supplying their goods in the form and of the quality suitable for such trade.

This applies especially to American export houses, which offer even better facilities for trade than Australia has yet evolved. The report substantiates reports being repeatedly received from visitors from the countries concerned as well as from Australian tourists and merchants returning from abroad, who all charge that the quality and packaging of Australian products, especially canned goods is inferior to that presented by American shippers.

Here lies one of the most important factors which Australia must recognise if she hopes to create or maintain trade with the East in manufactured foods of any kind and gives cause for definite study of this important phase of foreign markets.

Australian products are admittedly as good as, or superior to, those of any other exporting country, but until Australian manufacturers realise that the consumer has the right to expect goods in the form in which he desires them, the possibility of securing trade with foreign distributing houses will be small.

Tariffs.

At the moment, whilst there is an agreement between Great Britain and India regarding reciprocity in trade, Australia has no such agreement, and consequently she receives no preference from India over other foreign countries. As a result of the Ottawa Conference, certain preferences are given to British Colonies, but they are not, in all cases co-extensive, and Australia is placed on the same footing with goods from foreign countries, in fact, Australia suffers a disadvantage in comparison with goods from the United Kingdom, approximating 10 per cent. ad valorem.

This, then, is briefly the story of the Delegation's report. It does not support the general thought that the East supplies a vast potential market that Australia should cultivate.

The limited purchasing power of the natives and the smallness of the section of the population which might be expected to welcome Australian products, in comparison with the total population, gives reason for gradual, wise and constructive cultivation of the markets represented in the countries under report. With these limitations and the necessity to adapt commercial methods to actual economic conditions, plus the necessity for packing and packaging our goods in the form and of the quality desired, would seem to be the crux of the position.

APPLE AND PEAR EXPORT.

Shipping Freight Reduction for Next Season.

Statement by Prime Minister.

The Prime Minister (Mr. Lyons) announced on March 2 that as the result of negotiations over a considerable period, the main obstacles to an agreement between ship owners and pastoralists regarding freights and other conditions of overseas shipments of wool appeared to have been overcome.

Mr. Lyons said wool growers and ship owners had collaborated very helpfully in bringing the matter to its present satisfactory stage, and the Government also was appreciative of the spirit of co-operation displayed by Westralian Farmers, the large co-operative West Australian organisation.

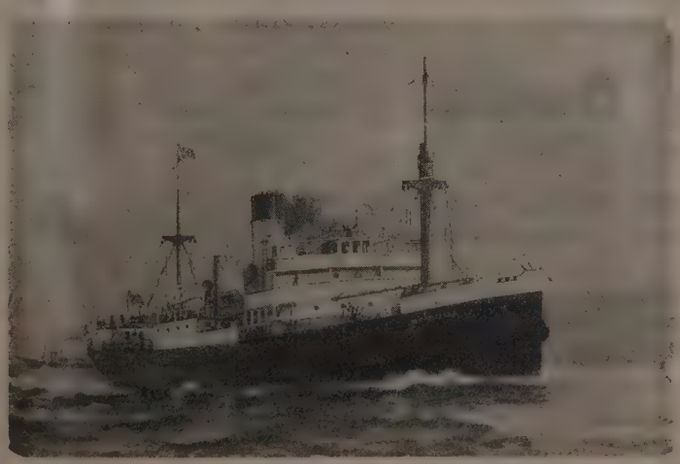
He was not yet in a position to disclose full details but was able to say that, if the negotiations were satisfactorily terminated, Apple and Pear growers would gain further substantial benefit commencing from next export season. These would be in addition to the reduction of more than 2d. per case in the freight on Apples and Pears since 1933.

FRUIT PROCESSING.

The incorporation of olive oil in the dips used prior to drying Grapes has in the past been as "home made emulsions" (states the Council for Scientific and Industrial Research). Finer emulsions, prepared by proprietary firms, are now on the market, and the standardization of these preparations in the dips has been commenced. The inquiry is particularly necessary in the case of the "cold dip," as both the fineness of the emulsion and the quantity of oil used react markedly on the fruit during the drying period. As this work necessarily includes storage trials, periodic examination will be continued during the full period over which the fruit is sold. The complete investigation by the C.S.I.R. combines laboratory and field examination in respect to the chemical changes and composition of the fresh and dried Grapes, and of the substances used in processing.

The measurement of moisture content, an important factor in keeping qualities, has been instituted by the standardisation and incorporation in commercial practices of an electrical moisture meter.

A new fumigant, ethyl formate, has also been standardised, and is being used extensively throughout Australia.



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PROMPT SERVICE - CAREFUL HANDLING - CHEAP RATES

The modern Patrick Steamers are specially fitted for the careful carriage of Fruit. Every shipment, whether large or small, is assured of the same personal interested attention. Prompt delivery and the greatest care in handling cargo are features of the Patrick Service

Steamers leave Melbourne, Sydney, Newcastle and Brisbane every week, carrying interstate cargo without transhipment. Cargo received daily. No need to book space. Consign your fruit to us, and we do the rest. For further information apply:—

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SYDNEY - MELBOURNE - BRISBANE - NEWCASTLE

Mr. T. J. McKINLEY
(Tasmanian State Fruit Board)

Reported Nov. 1936—

MANCHESTER

Has Been Neglected

"Of all the ports I visited Manchester probably has the best facilities for handling perishable products . . . . . .

The system of handling and delivering fruit to the buyers was all that could have been desired"

Direct Shipment

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Manchester Docks

Cuts out intermediate commissions, multiple handling and excessive transport charges and ensures a favorable market and maximum returns.

For further particulars and names of reliable brokers or private treaty salesmen at Manchester.

Apply to

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8 Bridge St., Sydney

Cables and Telegrams:—
"PORTOMAN," Sydney

Cement and Concrete

For Orchards and Packing Sheds

ALTHOUGH the use of cement and re-inforced concrete is practically now universal, there are many uses that can be made of these processes by orchardists, both on the farm and for cool stores, packing sheds, garages, storage rooms, floors, drives and many other forms of equipment.

Carriage Drives.

As one moves around orchard districts and sees the unmade roads leading into the farmyard or approaching the packing sheds, one often begins to understand why some growers are late at the market during the wet season when heavy loads on slippery entrances occasion delays, if not dangers. A job that is worth while and will be appreciated for many years is the making of concrete roads during the slack season. By doing the work himself the job can be fairly inexpensive to the orchardist, and any handy man can lay two strips as a drive for cars or trucks without any great technical knowledge.

Around the House.

It is apparent, on too many farms, how little thought is given to the comfort of the family who have often to trudge through mud in the wet weather in their work around the house or farm. A little planning and some work would provide orderly and appreciated paths around the house, garden and the most-used work sheds which would not only make the everyday jobs more comfortable, but would add greatly to the value of the property. Even an orchard in the country should not entail discomforts not expected in an average town, and since the lives of the family have to be lived under country conditions, every reasonable facility for comfortable living should be provided. Such lack of comforts is responsible for many country youths learning to dislike country life, and cause the drift to the cities which has already become an economic problem.

What is Concrete?

The following definition of the various materials used in cement work or concrete mixing is taken from "Concrete for Amateurs and Builders," published by the United Press, Melbourne, and appeared in the September issue of the "Australasian Poultry World."

Concrete is a mixture of Portland cement, sand, and screenings or gravel, with water. The name is derived from the Latin word "cretum—to grow," and it is called concrete because the fine particles of cement, when mixed with water, grow together. Indeed, concrete work depends for its success on the chemical action which takes place between water and cement. This begins as soon as they are mixed, and will continue almost indefinitely as long as water is available to the particles of cement. Tests have proved that concrete kept in a damp place shows increases of strength and quality up to 25 years and longer, that is why it is always emphasised that for good work concrete must be kept damp as long as possible.

What is Sand?

Sand is a natural material that varies considerably in color, cleanliness size of particles, grading and suitability for the various purposes. Cleanliness and freedom from harmful organic impurities are amongst the most important requirements for all work. Fine sand is preferred for plastering; medium-fine for brickwork and the making of ornaments; a well-graded medium fine sand for pavements, walls and buildings; while a coarse, well-graded sand is preferred for tanks and heavy wearing floor surfaces. Sea sand can be used for concrete, but the results will not be quite so satisfactory.

What is Gravel?

Gravel is obtained from natural deposits of water-worn pebbles, and includes all sizes, from ¼-inch upwards. For most work sizes above one-inch are not wanted. They are either rejected or broken down in a crusher.

What are Screenings?

Screenings are made by crushing and screening hard rocks, such as bluestone, granite, limestone or pebbles, and are the commonest of concreting materials.

How to Mix Concrete.

The best way to mix concrete is in a good batch mixing machine. It can be mixed quite well, however, by hand shovelling if the following simple instructions are carried out:—The stone, sand and cement should be thoroughly mixed in the dry state until of a uniform color and appearance. The batch should then be scooped out in form of a crater, the measured quantity of water poured in, and allowed to soak through the mixture. Turning over vigorously three times after this with square-mouth shovels will give a satisfactory batch.

What is a Mix?

Concrete mixtures are described according to the proportions of sand or stone which are used to each one part of cement. Thus, a mixture of 1:3:5 is reckoned as being at the rate of one paper bag (cubic foot) of cement, 3 cubic feet of clean sand, and 5 cubic feet of screenings of gravel, while a mixture of 1:3 mortar means 1 paper bag (cubic foot) of cement and 3 cubic feet of clean sand.

Proportions for various purposes:—

1:3:5.—Foundation and unimportant large masses, such as walls and heavy engine bases.

1:2½:4.—Pavement, tennis courts, motor drives, slabs, building, troughs, posts, silos and general uses.

1:2:3½.—Wells, tanks, swimming pools and sewerage systems.

1:1½:2½.—Floor surfaces for very heavy wear.

1:2.—Waterproof plaster coats for cellars, tanks and ponds.

1:2½.—Top mortar surfaces for paths, drives and tennis courts.

1:3.—Ornaments, such as sundials, seats, bird baths, fountains; ordinary wall plaster, rough cast and stucco.

1:4.—Mortar for stones and brickwork.

1:5.—Sand-cement building bricks; where strength alone is required; these bricks need to be waterproofed on the outside with a coat of cement plaster, paint or other waterproof material.

— THE —

BAVE-U

Power Sprayer

—— Keeps the Mixture in the barrel as even at the end as at the beginning of Spraying. ——

Information with pleasure.

Russell & Co.
Box Hill, E.11
Victoria

New South Wales News and Notes

ruit Crops in N.S.W.

THE FRUIT CROP REPORT from the N.S.W. Dept. of Agriculture, received early in Februry, gives information as follows:—

nland: Generally, pome fruits ps have developed satisfactorily, l earlier estimates are expected to exceeded.

At **Batlow**, all varieties of Apples isfactory. In Pears the Williams, sc and W. Coles look well; Jos. and Nelis moderate.

On **Northern Tablelands**, Jons., G. ith and Del. have good clean crops. lliams and Bosc Pears harvested isfactorily. Packhams ready for bruary delivery.

Hail caused damage in **Bathurst** dis-ct. Moderate yield of Williams ars harvested.

In the **Crookwell-Goulburn** area ple crops good. In Pears most rieties have good crops, but Cole d Nelis are only moderate.

M.I.A. (Griffith). — Average satis-tory crop of pome fruits. Cleo., ns. and King David have heavy ps.; G. Smith light to medium crop generally large sized fruit. At eton, Granny Smith, K. David, Jon. d Del. excellent crops. Canning of lliams commenced, and Packhams ars, also Peaches, commenced in nuary.

Prune crop heavier than anticipated: Agens heavier than Robes.

At **Kurragong** picking of early ples completed in January. Mid-ason and late kinds colored well: od crops of Jon. at **Baulkham Hills**, G.S. light.

(For citrus report see Citrus page this issue.)

Bananas.

In Lower Tweed area, February pplies lighter than usual. Brunsck reports fair marketings of nice ll-filled fruit. Around Lismore od growth noticeable in Banana antations. Medium quantities of ir quality fruit available for Februy, but effects of earlier dry weather parent.

Position satisfactory at Woodburn, t further rain is required. Good antitites of the higher grades of uit are being marketed from the Alonville locality.

The heavy rains of early January used a considerable amount of wash a number of plantations at Coffs arbor, but generally satisfactory eather was experienced. Medium arketings in February.

Around Macksville, growing condi-ns were very good, although hail as responsible for slight injury. ying foxes also caused some dam-e. Only moderate supplies are ex-ted to be marketed.

Pineapples.

Fairly good crops of Pines are in ospect at Lismore, and a consider-le proportion will be on the mar-t during February. Rough leaf rieties are now available, while mooth" are ripening.

The fruit is of medium quality at oodburn; the rough varieties are clined to be small as a result of adrse conditions earlier in the season. Blossoming took place under adrse circumstances around Grafton, d it is probable that Pines will be small, except in odd areas. Supplies are usually sufficient to satisfy local demands, but it appears doubtful if requirements will be met on this occasion.

Passionfruit.

Marketing from the Lismore district will be only light as the bulk of the Summer fruit has already been disposed of. **The cultivation of Passionfruit is said to have aroused considerable interest and marketings are likely to be heavier in a year or so.**

The Summer crop was a failure around Grafton, but prospects are excellent for a heavy Winter crop, following recent rains. All vines are now making vigorous growth and developing fruit.

FRUIT TREE PROPAGATION.

Experiments at Narara (N.S.W.).

Useful work for the benefit of orchardists is being carried out at the N.S.W. Government Research Station at Narara, near Gosford, N.S.W. The station was originally established for the viticultural branch, but Mr. H. G. White, the officer in charge, is regarded as one of the best propagators in the State, and his services were enlisted by the Fruit Branch of the Dept. of Agriculture.

In addition to progagating work, Mr. White is raising crossbred fruit trees for the Plant Breeding Branch. At Narara is located one of the State's four citrus experimental stations. All trees for the other stations are raised and supplied from Narara. New ground is now being broken for the planting of citrus on the contour principle.

An interesting plant is a Japanese deciduous Orange, Poncirus trifoliata, which was grown from seed and budded on Lemon stock.

A grove of citrus is maintained at the station for the exclusive use of the entomological branch.

ORIENTAL PEACH MOTH.

Not Severe on Murrumbidgee Irrigation Areas.

In reply to a question concerning the outbreak of Oriental Peach Moth in the Griffith section of the M.I. Area, the Director of Fruit Culture for N.S.W., Mr. C. G. Savage, states that the infestation is fairly widespread, but fortunately at the present time the infestation is very light, and no commercial loss has occurred.

Fortunately, the insect has not been located in the Leeton-Yanco end of the Area, and measures are being taken to prevent the introduction of the pest to that portion of the Area.

The matters of conrol are similar to those used by the Committee working in the Goulburn Valley. Parasites which are operating on the pest in the coastal areas around Sydney are being liberated in the Griffith area.

"I suppose you'll soon be planting your vegetable garden."

"Not me, but I can get all the fresh vegetables I want simply by letting my neighbors brag to me about their success."

FRUITGROWERS' FEDERATION OF N.S.W.

Hawkesbury District Growers Reject Proposal for Granting Statutory Powers.

At a special conference of delegates from local organisations affiliated with the Fruitgrowers' Federation of N.S.W., at Windsor on February 16, a resolution was unanimously adopted opposing the proposal that the Federation be granted certain statutory powers.

Among those in attendance was the Secretary of the Federation, Col. E. E. Herrod.

Mr. F. B. Mackenzie, who presided, outlined the proposals for certain statutory powers as dealt with by the last annual conference of the Federation, and asked for a resolution for or against.

Mr. C. Kaiser (Sackville) in moving that the proposals be rejected, said the desired powers were unnecessary: they were in effect the same powers, vaguely defined, as would have been possessed under the rejected Fruit Markting Organisation Bill.

The power to enter and inspect fruit wherever situated gave the Federation more power than the police or Department of Agriculture had; even the police could not enter without a warrant. The power "to do all things deemed necessary" for the extension of markets was a blanket clause, which would give the Federation almost unlimited power, covering, as it did, "all things." Mr. Kaiser regretted the omission of a clause making provision for the distribution of a fully detailed itemised balance-sheet to everyone who paid the Orchard Tax, before the date of the general conference.

Mr. Bulmer (Maraylya) in seconding, considered that Statutory powers vested in the Board would be extremely dangerous to the growers' interests. How could the proposals put one penny in the growers' pockets? He added that there would be a possibility that the growers would have to meet heavy charges if the Federation were given the powers it sought.

Mr. F. B. Mackenzie spoke in favor of the Board's proposals. The world's tendency seemed to be towards regulation and organisation of industry, and the Board's proposals were in harmony with that tendency. The suggested powers were necessary, and the provision for the representation of growers would make their abuse difficult. He admitted that the power to enter and inspect fruit needed clarification, and informed the meeting that the Department of Agriculture had suggested that some of the powers as at present defined were inpracticable. He approved of the issue of a balance-sheet, as Mr. Kaiser suggested, and in order to reassure growers he had had a motion passed at the general conference opposing any increase in the Orchard Tax. Mr. Mackenzie also advocated payment for delegates to district conferences, for at present the pecuniary loss, caused by loss of time, precluded the attendance of delegates residing a long distance away.

The motion for the rejection of the proposals was carried unanimously.

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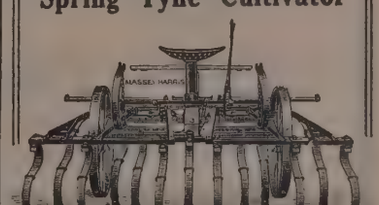
Without extensions, for vineyards, £14/5/-.

Fruit Shield over discs at small extra cost. Ask for the **Sunreach Folder** for full details.

Massey Harris Spring Tyne Cultivator



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BRISBANE ADELAIDE PERTH TOWNSVILLE HOBART

GERRARD The Tie That Binds

New South Wales Shows.

Gunning: At the recent show the principal prizes were distributed between H. W. Brown and G. Brown, Among the Apple varieties were Democrat, Granny Smith, Jonathan and Rome; Pears, W.B.C., Packhams and B. Bosc. Excellent Peaches, Plums, Nectarines, Grapes and Melons were also on view, prizes being won by F. Finn, W. G. Friend, G. Brown and R. Lees, Miss J. Gorham, B. Baines and C. Bowtel.

Wollongong: Some of the principal prize-winners in the fruit section at the recent Autumn show included E. M. Gallagher, Miss C. McMahon, Mrs. R. Walker, J. J. McClelland, Mrs. Monteith, Mrs. E. Keys, J. Milburn, E. Gibson, E. Coleman, E. A. Oxley, Mrs. S. Meehan, C. W. Cornford, Mrs. T. Lewis, G. and D. Allsop and A. T. Larkin. The fruit included high quality Apples, Peaches, Pears, Apricots, Grapes, Quinces, Figs, Passionfruit, Strawberries and Tomatoes.

Castle Hill: The Fruit Exhibits at the Castle Hill show were well up to the standard of the district. Included were Apples—Fanny, Democrat, G.S., Aitkens Seedling; Pears — Packham, China; Valencia Oranges also Lemons, Grapefruit, etc. The prize-winners included A. G. Banks, J. Farram, A. J. Longley, A. McBurney, H. Shonk, E. E. Gilbert, C. W. Crane, J. Nutter, W. Gledhill. Award for the most successful exhibitor, J. Farram.

URALLA.

Fruit section results at 64th annual show of the Uralla Agricultural Society were:—Apples: Collection for export, H. E. Wilkinson; Jonathan, H. E. Wilkinson; Granny Smith, J. M. Jenkins; Delicious, A. A. Wilkinson; Tasma, J. M. Jenkins; Rome Beauty, A. A. Wilkinson; table, J. M. Jenkins; Lalla, H. E. Wilkinson; collection (dessert), H. E. Wilkinson. Pears: Table, H. M. Croft; Williams, A. A. Wilkinson. Packham, A. A. Wilkinson; Beurre Bosc, G. M. Edward; any other variety, A. A. Wilkinson; collection, A. A. Wilkinson. Peaches: Freestone, C. W. L. Taylor; freestone, C. W. L. Taylor. Grapes: E. Faulkner. Tomatoes: F. J. White and Co. Collection, White and Co. Plums: Light, H. M. Croft; dark, A. A. Wilkinson; export class Apples, Jonathan, H. T. Wilkinson; Granny Smith, H. M. Croft; Delicious, A. A. Wilkinson; Rome Beauty, A. A. Wilkinson.

INVERELL.

Inverell Agric. Show was opened on February 27 by the N.S.W. Minister for Education (Mr. Drummond).

Awards:—

Fruit.—Grapes: Black, J. McDonald; Black Muscat, J. McDonald; White Muscat, J. McDonald. Apples: Granny Smith, Mrs. C. Walder; Jonathan, Mrs. C. Walder; a.o.v., Mrs. C. Walder; baking, Mrs. C. Walder. Peaches: Yellow flesh, Mrs. Currie; white flesh, Mrs. C. Walder. Pears: Eating, Mrs. C. Walder; baking, Mrs. C. Walder; collection, Mrs. C. Walder. Nectarines: F. J. Wells. Quinces: T. J. Davies. Collection of Apples: Mrs. C. Walder. English Plums: Mrs. C. Walder. Collection of fruit: Mrs. C. Walder.

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"FRUIT WORLD ANNUAL" APPRECIATED.

Mr. J. B. Randell, of Gumeracha, S. Australia, writes as follows under date February 22, 1937:

"I am in receipt of the "Fruit World Annual," which I observe is up to its usual high standard of excellence, and is much appreciated."

NEPEAN DISTRICT SHOW.

Fruit awards at the Nepean District Show, the 54th of the series, held at Penrith on February 26 and 27, were as follow:—Apples: Collection R. T. Gifford; citrus fruit, collection S. E. Allen; Grapes, collection, H. Basedon; do., white, heaviest, M. Vincent; do., black, heaviest, M. Vincent; do., Black Muscat, M. Vincent; do., White Muscat, M. V. Crawford; heaviest bunch, M. Vincent. Apples: Dessert, S. Howell; do., baking, A. J. Plunkett. Pears, collection, R. T. Gifford. Oranges: Navel, main crop this season, A. J. Plunkett. Lemons: S. E. Allen. Figs: S. Howell. Grapefruit: T. Williams. Quinces: A. Hogson.

ROBERTSON.

Fruit.—Collection: H. McAndrew. Apples, collection, C. Parker; case, T. Bell; 6 largest, H. J. McAndrew. Granny Smiths, C. Parker; . Five Crown, J. Shipman; Northern Spy, H. J. McAndrew; Gravenstein, J. Shipman; Jonathan, J. Shipman; any other variety, H. J. McAndrew; baking Apples, T. Bell. Pears: Table, J. Missingham; baking, C. Parker; collection, J. Missingham. Quinces: H. J. McAndrew. Melons: H. J. McAndrew. Peaches: H. J. McAndrew. Lemons: Common, H. J. McAndrew. Plums: English, C. Parker; Japanese, C. Parker; collection, Mrs. Schuhmann. Collection Tomatoes: H. J. McAndrew. Lemons: H. J. McAndrew.

NEWS IN BRIEF.

(Continued from page 4)

The Burnley Selection strain of Canadian Wonder Bean has been proved, after exhaustive tests to be 10 per cent. resistant to Halo Blight, and the Orbost (Vic.) district bids fair to be Australia's chief producer of Bean seeds.

At the Valley View Orchard, Pakenham, Vic., there are 175 acres under Apples, and only five varieties are grown, viz., Yates, Jonathan, Rokewood, Delicious and Granny Smith.

Apple export from N.Z. this season is being conducted under a Government guarantee.

The Trade Delegation which recently visited India, Burma and Ceylon, does not visualise any extensive development of Australian trade there. Certain improvements are suggested in the packing of some Australian goods.

The Market Gardeners Ltd., Wellington, N.Z., is an example of success in co-operative marketing.

Efforts are being made by the Plant Breeding section of the N.S.W. Dept. of Agriculture to improve Banana varieties. Desirable characteristics of the Cavendish and Gros Michel are noted, sports and seedlings are under observation and new varieties are being imported from abroad.

Under the present political regime in N.Z., various sections of the fruit industry appear to be coming under Government control.

New Zealand News and Notes

HE MARKETING COMMISSION — CONTROL OF BANANAS AND THER FRUITS — SOCIALISM OR PRIVATE ENTERPRISE — EFFECT F SHORTAGE OF STONE FRUITS ON THE MARKETS GENERALLY — FECT OF WET WEATHER ON EXPORT FRUIT — FACTORS RROUNDING THE GOVERNMENT GUARANTEE — SUCCESSFUL CO-OPERATIVE ENTERPRISE.

(By Our Correspondent.)

N OUR JANUARY NOTES we made reference to the **Marketing Commission**, and the indication at the semi-Government control er imported fruits was likely to be tended to **Bananas.** According to announcement by the Government ring the last few days our anticitions were not far short of the ark.

For some years the output of moan Bananas, which has been virlly under the control of the Gornment, has been put up for public der. Under the Government's new licy this practice is to be discon-ued, and one firm—Messrs. Turn-'s and Growers of Auckland, are be the distributors for New Zea-nd at prices to be fixed from time time by the Government in collabor-ion with the distributor.

The idea behind the scheme seems be to fix Summer prices at a level ich will show a sufficient margin profit to offset the losses which are ways experienced in the Banana ade during the Winter months. hat effect the control of the Samoan uation will have on the imported nanas from other Pacific Islands mains to be seen. Already there are rmurings among the merchant ms interested in the Banana trade. certain quarters it is recognised at a certain amount of Government ntrol on the matter of price would of assistance to the trade gener-ly, but that the Government has seen to appoint one firm to handle the siness does not evidently find favor all quarters.

Undoubtedly the New Zealand fruit dustry, both imported and local, is tering an era of control, and before ng it can be expected that all fruits ll be brought under the scheme, at ast, until such time as there is a ange in the political situation.

Present developments indicate at fruit business and politics will, the future, become very closely as-ciated. The existing tendency to-ards socialisation of some of New aland's principal industries will ul-mately create a strong opposition from those who object to the wide interference that is taking place in connection with all types of business.

Already there are indications that the next election will be fought out on the issue of individual enterprise versus State socialism.

It is outside our province to forecast the result of such election, but with rising costs guaranteed prices are not going to mean to the farmer just what he thought they would, and the effect is likely to be reflected when the New Zealand public has the opportunity of voicing its opinion at the 1938 elections.

Marketing Commission.

We understand the report of this Commission is in the hands of the Government, and it is being printed for circulation. It is understood that the move in connection with Samoan Bananas is as a result of the Commission's report on this phase of the fruit business.

There are rumors of very interesting developments in connection with other fruits.

On present local market prices it would be very difficult to see where a scheme of marketing was justified with the returns to growers so good.

The shortage of stone fruit caused by the Hawke's Bay frost has tightened all markets through New Zealand, and it is a comparatively easy job to sell fruit to-day, whereas in normal years buyers select the best at comparatively low prices and the balance usually creates a lot of hard work for the auctioneer.

To-day everything is snapped up readily, and the stonefruit grower who has had a crop should show an average price level that has been unknown for years.

Early Apples and Pears have also benefited, and as far as the Wellington market is concerned, Gravensteins, which are the main dessert variety in late January and February, have realised prices ranging from 9/- to 14/- per case. Green C.O.P. have been showing returns of 6/- to 11/-, so that present indications are that the fruitgrower this year is going to get a fair share of good times.

Export.

Local prices are going to have an influence on the export trade. Cool storage companies are working here in the various fruit districts securing bookings. Reports to hand from Nelson show more optimism regarding crops, but we nevertheless feel that the export figures will at the end of the season prove to be disappointing. Size will be another restricting factor in the export trade. New Zealand generally has experienced one of the worst Summers on record—not a week passes without heavy rains, and with only a medium crop on the trees, quite a proportion of the fruit is likely to run too large. This will apply particularly with **Jonathan** and **Sturmer**, also **Delicious**, where the crops are patchy. These three varieties make up the bulk of New Zealand's export trade. The estimation of space requirements will be a real problem for those responsible. There are so many factors which have to be taken into account, and with the addition this year of a good local market, estimates are going to prove troublesome.

Government Guarantee.

The conditions governing the guarantee are in print and will be published before these notes make their appearance. There will be a stipulation in connection with the Government guarantee that orchard wages as fixed by the Minister of Labor must be observed to secure full advantage of the guarantee, and in all probability the Minister's announcement of wages will be made retrospective.

All grades, varieties and sizes seem to be covered by the 10/6 C.I.F. guarantee. In some ways this is a bad feature in that insufficient encouragement is given to the grower to produce the best possible. This has always been a regrettable feature of the Government guarantee as it has applied in New Zealand, for which nobody is really to blame as it is so difficult to devise any scheme without placing a hardship on some section of the growers.

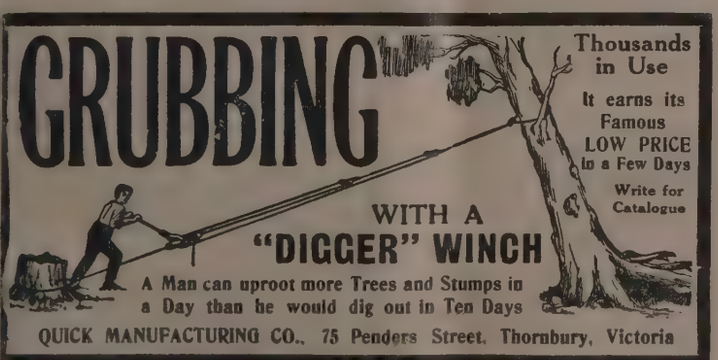
The guarantee is actually a minimum guarantee and outstanding fruit in a reasonable marketing season should secure its own premium. On the other hand, when prices are low the grower of the good fruit only receives the same as his neighbor with poorer varieties and poorer grades. The tendency therefore is for all fruit to be brought down to the one common level.

Co-operative Enterprise.

That co-operation can succeed in face of strong competition from individual enterprise is proved by the very favorable balance sheet which has been issued this year by Messrs. Market Gardeners Ltd., of Wellington. This concern, which is in its thirteenth year, went through the usual vicissitudes of co-operative organisations in its early years. The concern since coming under the management of Mr. E. G. Robertson (present chief executive officer) has made continued progress and the appropriation account after payment of 6 per cent. dividend is showing a favorable balance of £4,500 (approx.). With a paid-up capital of only £3,050, this reflects great credit on the concern. From our knowledge of the position we would say that the assets are shown at a very conservative figure.

A new departure for the future will secure to shareholders a rebate on selling commissions of 1¼ per cent. The directors have decided that fresh applications for shares will be accepted at par, but will be limited to ten shares each. This concern seems destined to take a very prominent place in the future marketing of fruit in Wellington.

GRUBBING WITH A "DIGGER" WINCH



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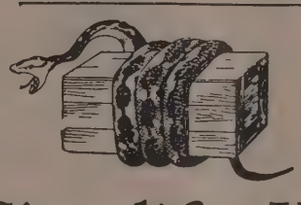

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The Victorian Fruit Marketing Association

THE monthly meeting of the Executive of the Victorian Fruit Marketing Association was held at the Board Room, Commercial Travellers' Association, on Friday, February 5, 1937, at 11 a.m.

There were present Messrs. G. W. Brown (President), W. H. Carne and A. S. Harrison (Vice-Presidents), J. B. Mills, G. H. Sprague, W. P. Hutchinson, S. Brown, R. A. W. Bailey, E. Russell, G. Douglas, H. M. McLean, W. A. Thiele, K. Weeding, J. M. Ward (Superintendent of Horticulture), and the Secretary, R. E. Boardman.

Apologies were received from Messrs. F. Moore, J. W. Barker, F. R. Mellor and F. Cave.

Port Brisbane Case.

Letter received from Batlow Packing House and Cool Stores Rural Co-op. Soc. Ltd., thanking the V.F.M.A. for their donation of 50 guineas. In response to the Association's letter, further donations had been secured, namely: Exporters' Handling Committee, £25; Northern Victoria Fruitgrowers' Association, £10; Orchardists and Fruit Cool Stores Association, £5/5/-. The Cool Stores Association advised that they were communicating with their membership with the prospects of securing additional funds.

Australian Market Committee.

The Chairman reported that a Conference had been held on January 29, three delegates attending from each of the following Associations:—The Victorian Fruit Marketing Association, Orchardists and Fruit Cool Stores Association, Southern Fruitgrowers Association. The Northern Victoria Fruitgrowers' Association had expressed their interest, but unfortunately no delegates could attend on the date selected.

The situation with relation to the production and export of Apples and Pears had been discussed, special mention being made of the loss of the German market, valued at 1,500,000 bushels, the potential increase in the Australian production of Apples estimated at over 20 per cent., and the necessity for increasing Apple consumption in Australia.

Continuing, Mr. Brown stated that the proposals now envisaged an Australian Market Committee of the Council, the funds to be provided by a small levy per case.

Mr. J. B. Mills stated that the creation of an Australian Market Committee had been forced upon the Council when certain varieties for export had been deleted, and grades and quantities for export had been defined.

New South Wales growers, continued Mr. Mills, had recognised that additional varieties and quantities were likely to come on to the Sydney market. All relevant matters had been discussed at the Hobart and Adelaide Conferences of the Council, this matter of the Australian Market Committee having been deemed to be one of primary importance. The Committee would have power to co-opt traders and others. He felt sure that the publicity campaign would fully achieve its objective.

The Chairman stated that in common with others he had supported the clause in the proposed constitution, that the Chairman of the Australian Apple and Pear Export Council should also be the Chairman of the Australian Market Committee, as the Council had won the confidence of the Government and the most effective liaison was necessary.

After full discussion on various phases of the proposals, it was decided on the motion of Messrs. Hutchinson and S. Brown to oppose any alteration in the draft constitution of the Australian Market Committee as submitted by the Apple and Pear Council.

Messrs. G. W. Brown and F. Moore were appointed delegates from the V.F.M.A. to the Victorian section of the Australian Market Committee.

Railway Trucks.

Letter received from the Chairman, Railway Commissioners (Mr. Clapp), in response to the Association's letter, stating that following the previous advice from the V.F.M.A. as to trouble through unevenness of floors of trucks, a thorough inspection had been made, and a design had been developed, which it was felt would strengthen the floors and obviate the trouble complained of.

It was hoped, however, to deal with about 200 trucks per annum and arrangements were being made accordingly.

Information Noted.—Decided to write appreciatively to Mr. Clapp.

Empire Fruits Council.

The Apple and Pear Export Council advised that a report had been received from Mr. Everard Ross, the Council's representative in London, stating that at the last meeting of the Empire Fruit Council the question of import duties had been considered. The Chairman of the Committee, Sir William Lobjoit, had reported having waited on the Import Duties Advisory Committee, regarding the measure of protection in U.K. on Empire fruit, which had been reduced owing to the depreciation of the American dollar. Sir William had stated that the effect of the depreciated currency upon the 4/6 per cwt. rate of duty was being very closely watched, and if necessary, the I.D.A.C. would take action without waiting for any pressure from the Empire Fruits Council.

The Chairman stated that the Empire Fruits Council, which had been created largely as a result of pressure from Australia, was an important body, and he looked forward to good service being rendered on behalf of Australian growers. He felt, however, that there was more involved in the question of preference than was covered by the depreciation of American currency.

New Members.

The Secretary reported having enrolled 8 new members as follow:—Messrs. R. G. Begg, B. H. Harvie, W. A. Olsen, A. D. Harvie, R. A. Roberts (Pakenham Upper); A. H. Sapwell (Pakenham); A. Ramage, L. A. Fraser (Pakenham East).

Report received, new members accepted.

Grading to Sizes.

Mr. R. Bailey reported that shippers were requesting Apples to be packed to sizes, whereas in the past the tendency had been to pack to counts.

There was a full discussion on relative merits of the two systems, some stating that the packing to sizes was a retrograde step and that counts would probably be adopted in subsequent seasons.

Mr. Russell stated that in addition to bought fruit the consignment firms were also requesting packing to sizes instead of count.

Mr. Harrison said he trusted growers would be seized with the importance of packing to sizes and branding cases accordingly, as con-

(Continued on page 37)

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THE MARKET GROWER

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ALSO OFFICIAL ORGAN OF THE KOONDROOK & BARHAM TOMATO GROWERS' ASSOCIATION.

Orbost Means Beans

Retrieving a Lost Industry

Blight Overcome.

THE 32,000 ACRES of Victoria's most prolific alluvial soil that is represented by the remarkable flats along the Snowy River, in the south-eastern corner of the State is the scene of two spectacular primary industries: maize growing and Bean production.

Up until some seven years ago, Orbost was known as the home of the seed Bean industry in Australia. About that time a period of sufferance from the ravages of Halo Blight began, and whereas Orbost had previously not only supplied the major contribution to Australia's Bean seed requirements, but had also enabled an export trade to be secured in which something like 8,000 sacks per annum were exported, that trade entirely disappeared as a result of prolonged and insistent attacks of Halo Blight, which caused tragic losses to many growers and robbed Orbost of one of its main industries.

So serious did the havoc of Halo Blight become that the help of the Department of Agriculture was enlisted in search of a variety of Bean that would be resistant to the disease. Naturally such a discovery necessitated long search and careful and slow progress but, fortunately, the efforts of some of the more progressive growers and officers of the Department have been crowned with success, and it is now possible to report that a definitely resistant variety has been propagated, the story of which success is a record to be highly commended.

Amongst the best-known growers in the Orbost area are the Russell Bros., Fisher Bros. and T. H. Edlington. For many years Mr. G. H. D. Russell had been conducting experimental plots with various varieties of Beans on behalf of the Department and, after several methods of seed treatment had proved ineffective, about six years ago, in the midst of a heavy incidence of Halo Blight, a few bushes of Canadian Wonder Beans were found to be resistant amongst others that had entirely succumbed to the disease. From these resistant bushes a mere handful of seed was harvested, jealously guarded, planted and carefully watched for evidence that they would throw more resistant plants.

The first samples were taken to Burnley Experimental Station, and when the first year's test looked satisfactory, progeny seed was put out in experimental plots at Orbost and Wahgunyah, where the result proved to be totally resistant and became the nucleus of future plantings.

With high hopes a larger acreage was sown at Orbost, and expectations of releasing limited supplies of proved resistant seed were entertained. The seed was named "Burnley Selection of Canadian Wonder," but, unfortunately, all the Department's proved Burnley seed was lost in the 1935 floods that devastated the lowlying trial plots from which so much was expected. Happily, however, a limited supply of resistant seed had been preserved by Mr. Russell and his brother, William, and had been planted upon higher ground out of reach of the flood waters, and this small quantity became the second nucleus of the present crops which are going to revolutionise Bean growing in the Orbost district, guarantee of permanent supply of Burnley Selection and prove the saving of the Bean seed industry.

As reported in January issue of "Fruit World and Market Grower," in a reprint from a report released by Mr. A. T. Pugsley, Assistant Plant Pathologist of the Victorian Department of Agriculture, definite proof has now been established of the resistance of Burnley Selection of the Canadian Wonder Bean to the Halo Blight, and Orbost is on the road to recapture her premier position of supplier of Bean seed to Australian growers with the added distinct possibility of recapturing Australia's lost export trade in this seed.

Some of the Growers.

Our representative recently spent a week in the Orbost district, inspecting many of the crops, and found that so favorable is the present season and so assiduously have growers cultivated the resistant variety. that in the coming harvest it is estimated that at least 2,000 bushels will be available for distribution.

So sanguine are the growers of the success of the Burnley Selection, that they plan to concentrate upon this variety in the hope of reducing the present effect of the blight and eventually eliminating it from the entire district.

Photos. taken of some of the plots seen show the ravages of the blight in various stages of total extinction. In some cases varieties have had to be ploughed up and the ground sown with Peas, other plots have been sown with Maize as a rotation crop, and still other plots have been entirely lost.

Amongst many varieties seen were Brown Beauty, Staley's Star, Emperor William and Staley's Surprise, all fairly resistant, but all showing decided effects of blight. Mr. Pugsley, in the June issue of the "Agricultural Journal," describes how they planted purposely infected seed in 1934, and alongside the rows of such seeds they planted Burnley Selection seeds. The result was that the infected seed of commercial Canadian Wonder was 100 per cent. a failure and the Burnley Selection rows were practically totally free from the blight. The picture illustrated herewith visually corroborates the resistance of the Burnley Selection, since in 55 acres, part of which is shown, only one or two isolated plants were in any way affected with blight. It can be quoted as 100 per cent. resistant even in that large single area.

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Portion of 55 acres of resistant "Burnley Selection" Canadian Wonder Beans on property of Messrs. Russell Bros., Orbost, Vic.

The Burnley Selection is characteristically typical of the original Canadian Wonder Bean, yet retaining the resistance to the blight which first excited interest in it.

Inspection of many plots in the district proved several surprising features. Brown Beauty was extremely badly affected on all plots. One plot of Staley's Star (Sutton's Peerless), though claimed to be more resistant, was still badly affected, whilst Feltham's Prolific and Emperor William plots showed the least attack, at the time, but had definite signs of blight throughout the plots.

Resistant Stocks Available.

As indicating the quantities expected to be available for distribution after the coming harvest, it was discovered that Mr. G. H. D. Russell has about 25 acres under Burnley Selection, and Mr. W. Russell about 75 acres, so that it appears quite reasonable to expect that 3,000 bushels of proved resistant Burnley Selection Bean seed will be available for distribution after the coming harvest.

The Orbost Method.

The general method of cultivation and harvesting of Bean seed in Orbost on a large scale may be interesting to the market garden section of our many readers, and is therefore very briefly set out hereunder:—

Cultivation: The ground is ploughed during early Spring to a depth of 7 to 8 inches, allowed to lie in fallow till about the middle of November, when it is reworked to a fine tilth ready for sowing.

Sowing: This is done with a Maize planter closed in to a width of 2ft. 4 ins. The seeds are dropped every 4 to 8 inches.

Cleaning is done periodically by horse hoe or scarifier and kept going continuously until the plants are in full bloom. Usually each field receives five strokes with the scarifier during the season. In addition, hand hoeing is done, usually requiring two hoeings to complete the cultivation.

Harvesting: When ready for harvesting, the plants are hand-pulled and placed in stooks upside down on the rows to dry, when considered ready to remove they are carted to the hessian sheet threshing floor and rolled on a hot day to release the seed. The straw is then raked away and the seed winnowed from dust, and the resultant seed is then carefully hand-sorted. Discarded seed is separated and used for pigfeed, and the perfect seed bagged ready for market. Naturally careful selection of seed is of the greatest importance, as obviously any inferior seed distributed would result in subsequent inferior crops, and Orbost seed could not maintain its reputation for quality.

Certification.

We understand that steps are already being taken to have successful growers certified, and that the Department of Agriculture, recognising both the need for ensuring that the resistant qualities of the Orbost production of Burnley Selection shall be maintained, and that wise and careful distribution is arranged, are watching with interest this most satisfactory outcome of the problem which the introducion of Halo Blight forced upon the industry.

In 1934 a quarter acre plot produced at the rate of 43 bushels to the acre, and last year, out of four acres of Beans grown under rather adverse conditions, a yield of 35 bushels per acre was obtained. It is reasonable to expect, therefore, that with predictions at the moment being favorable, a high average yield can be expected in the coming harvest.

Judging by appearances of the various plots inspected, it is not too ambitious to expect that an average yield of 40 bushels per acre will be obtained. The dry conditions existing at time of the visit might slightly reduce the above estimate, but, given light rains, the yield will even be in excess of 40 bushels per acre.

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CITRUS NEWS & NOTES

Annual Citrus Conference

Resolutions Adopted. Supervised Marketing to Continue.

THE 17th ANNUAL Conference of the Central Citrus Association of Victoria was held in Melbourne on February 9 and 10, when a full attendance was registered.

Captain D. B. Halhed presided, and the following delegates attended:—P. Cobbett (Bamawm), S. P. Taylor (Curlwaa), H. O. Symons (Merbein), H. Wormwall (Mildura), R. J. Watson (Perricoota), D. J. Walters (Murrabit), N. W. Fairless (Shepparton), J. Lindner (Wangaratta), P. Rossiter (Ngawe), R. Hollins (Red Cliffs), J. Logan (Naneela), and M. Langdon (Coomealla).

Visitors present included A. P. Wishard (Pres. Murray Citrus Growers' Co-op. Association), A. O. Nicholson, J. L. Provan, Horticultural Research officer, J. M. Ward, Superintendant of Horticulture, and D. Gordon (Mildura).

In declaring the conference open, the Chairman welcomed the delegates and visitors, and stated that during the past year the citrus position had been well maintained, and supervision of the Melbourne Wholesale Markets had proved effective in controlling undue price fluctuations. The Association's advertising policy had shown good results at a very economic expenditure.

In spite of some modification of the New Zealand embargo in favour of Victorian growers, the position has not materially changed. In response to much urgent representation, Government had authorised the provision of telephonic facilities for two district inspectors. Whilst appreciating this too-small concession, the Association feels that Government should act more generously in a matter which is of vital importance to the industry.

They had strongly supported the protests, in conjunction with other fruit interests and the press, against the absurd remuneration and conditions under which Departmental officers were working.

It was high time that the Victorian Government recognised the value of their expert officers and provided conditions that would preclude their transfer to more lucrative positions in other States and the commercial world.

Resolutions.

Amongst many matters provided for on the agenda, some of the resolutions passed were as follows:—

Quarterly Reports.—That quarterly reports of the V.C.C.A. activities be prepared and circulated to all branches.

Synthetic Fruit Products.—That in view of the alarming development of synthetic beverages and adulterated foods, the Association endeavour to secure legislation to prohibit the sale of drinks, ice-cream, ice-blocks, etc., which are made from synthetic ingredients.

Freights.—That representations be again made to the Minister for Railways with a view to having factory supplies of citrus fruits brought under the Agricultural produce rate.

Price Returns.—That this conference appreciates the action of the V.C.C.A. in obtaining a more favorable price for factory fruits than in the previous year, and urges all growers to support that body during the coming season.

Pests and Diseases Act.—That last year's resolution be reaffirmed:—That the V.C.C.A. take immediate action to endeavour to secure the tightening up of the Vegetation and Vine Diseases Act, 1928, and the inclusion in it of power, and obligation, of the Department of Agriculture to insist upon the keeping of proper cleanliness and action for pest control on citrus orchards, or the destruction of affected trees.

Sales Report.—The market manager stated that sales made by accredited Melbourne agents up to December 31 were on the average a little higher than in 1935. Navels and Valencias were a little lower. Grapefruit, 3½d. per bushel higher, Mandarins were 1/- higher, and Lemons lower.

A comparison of returns in the last three years were tabled and showed as follows:—

	1936.	1935.	1934.
Navels	7/0.4	7/0.7	6/1
Mardarins	7/4.6	6/4	5/11
Lemons	6/8.8	7/0.6	4/10.3
Grapefruit . . .	7/9.8	7/6.2	7/9.8
Commons	6/1.9	6/2.5	5/5
Valencias . . .	9/0.6	9/2.4	7/9

Crop Report.—The Navel crop for Victorian and border areas was the lowest for the past 6 years. The production from new plantings was not sufficient to check the fall in the total yield, which is attributed to several causes, including water-logging, insect pests, fungus diseases and neglect.

Referendum.—Occasion was taken to discuss the forthcoming referendum poll, and on the motion of delegates who personally favored a "No" vote in the interests of the citrus industry, approval of support for the "Yes" party was carried, because of its potential benefit to other primary industries.

Marketing Conditions.

A great deal of time was given to consideration of the marketing policy to be maintained and the number of accredited agents to be approved. The market manager, Mr. G. K. Kerr, reported upon the present satisfactory conditions prevailing and stated that the proposal to increase the number of agents would not be in the interests of the growers and would make the equitable control of price fluctuations less effective.

Many delegates spoke both for and against the proposed increase. The chairman allowed very full discussion, and finally it was resolved that "After a long consideration of the Association's marketing policy, this conference agrees that the present system of selected accredited agents and merchants is the only practical one for the present."

Gas Storage.

Mr. A. O. Nicholson attended, and at the invitation of the conference, gave a lecture upon the Lockyer system of gas storage of fruit. He submitted that gas storage was the coming method. Experiments in England were reported to be satisfactory, and research in Australia was progressing favorably. A vote of thanks was accorded to the lecturer.

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Citrus Round The World

The world production of Oranges (cluding Mandarins) in 1936 was proximately 180 million boxes. S.A., Spain, Brazil, China, Japan d Palestine, in that order, were the gest suppliers, and countries like itish Honduras, British West In-s, France and Cyprus, produced lowest total quantities.

S. Africa: 1936, established a re-d for the quantity of cases of fruit it overseas from Port Elizabeth in y season.

France: In the first half of 1936, ance imported 180,000 tons of Or-ges, of which 170,000 tons came om Spain, 3,000 tons from Palestine d 2,000 tons from U.S.A. Syria, st year, supplied large quantities the first time, and Algiers more an doubled the quantity which she ported to France in 1935.

Two special permits were issued r U.S.A. Oranges to enter France; ,000 tons and 3,600 tons respectively ere the quantities approved.

Mediterranean Countries.

The Orange crop will be bigger an last year, according to Mr. L. D. allory, U.S. Attaché in Paris. In ite of the war in Spain, citrus cul-vation is proceeding without much terference, but whether the crop n be exported is not yet known. alestine is enjoying favorable eather conditions with a large crop sight. Sicily is rated as good, and xports will be substantially larger an last year.

Switzerland: The Swiss Government nounces a reduction of duty on alestine Grapefruit and Lemons from fr. 3.00 per 100 kilos to duty free. ranges, which were charged Sfr. 0.00 have been reduced to Sfr. 5.00 er 100 kilos.

U.S.A.: A seedless Grapefruit is reported from Texas. It is said to be a sport from the Pink Marsh and has red flesh with slightly red skin. In three years it has shown no variation from type. It has already been well received and is expected to become very popular.

Spain: A report in November last stated that Valencia Oranges would be abundant. Since that date, the exigencies of war have depopulated the Orange districts and a recent press report says that the fruit is rotting on the trees because there is no labor available to harvest it. Scandanavian and Swedish ships ceased calling at Spanish ports soon after the civil war commenced, and the merchants in these two countries have transferred their patronage to Palestine.

Russia: A party of Russian agents recently visited California and purchased 100,000 young citrus trees for planting in the Crimean and Caucasian areas along the Black and Caspian seas. They stated that their immediate objective was to supply the citrus wants of 175 million Russians instead of importing such fruit or of breaking into the citrus export business.

Algeria: About 150 orchard owners have 20,000 acres under citrus trees in Nigeria. The average returns for fruit "sold on the trees" is £53 per acre. Cost of production is estimated at from £5 to £26 per acre, according to locality and management. The methods of cultivation are rather slipshod and little account is taken of tree-type selection, irrigation, culture or fertilization as is known and followed in other citrus countries.

CITRUS CROPS IN N.S.W.

CITRUS CROP CONDITIONS in New South Wales are described in a report received early in February from the N.S.W. Department of Agriculture as follows:—

Generally medium to light crops of Navels are apparent at Yenda, but it is as yet too early to give any definite indication of prospects. Valencias and Lemons are medium to good. It is stated that Mandarins shed heavily early and the fruit is likely to be large. It is reported that heat wave conditions early in the month caused some slight distress to citrus trees at Leeton. Navels are patchy and light; Valencias are also light and in places very light. There is a moderate to good showing of Lemons.

Prospects for Navels are not at all bright in the Kurraiong locality, and the crop will probably be one of the lightest for many years. Most of the Valencias have been harvested in orchards on the lowlands, but there is still a considerable quantity of fruit remaining on the higher locations. A light to medium crop of Mandarins is apparent throughout this area; trees are making good growth and the fruit is filling well.

Significant features of the Windsor and Hills districts are the uniformly heavy shedding of main crop citrus and the profuse blossoming which followed the December rains, pointing to a light citrus crop next Winter.

Practically all the Valencias have been harvested in the Wiseman's Ferry district. All citrus trees are reported to be shedding young fruit, and if it keeps falling crops will be very light.

A profuse blossoming of citrus trees took place at Maitland after the rains but fruit does not appear to be setting.

CITRUS EXPORT TO FAR EAST.

Trial Shipment Sent.

In an attempt to find a further output for Victorian citrus fruit, a trial shipment is now on the way to the Philippine Islands in the S.S. "Taiping." It consists of 250 cases of Lemons and 30 cases of specially selected Apples. Reports of carriage, landing quality, reception and price will be eagerly awaited in the hope that future shipments may be possible.

PRUNING ORANGE TREES.

S.A. Grower's Advice.

At a meeting of the Ramco Fruitgrowers' Association some time ago, Mr. F. Lewis addressed the members on the above subject. He stated that it was unfortunate that so many growers of citrus trees had so little knowledge of how they should be pruned. It was the usual practice, he said, to let them go for a few years, except to cut out any limb which grew straight up or was in the way. It was easy to grow Oranges the first ten years, but after that time the trouble commenced. By then they would be full of dead wood, and it would be a very difficult job to remove a mass of dead wood and crossed limbs. However, an Orange tree was one of the easiest trees to prune.

It was first necessary to start from the butt and clean out all the dead wood, and then start pruning. It would be seen that the fruit was heavy but the limbs were pliable, so that all limbs grew outward and upward, but the heavy fruit dragged down the limb, causing it to bend. A shoot grew out of the bend, and that went on year after year. It was obviously necessary to cut off the portion beneath the limb, i.e., the spent wood. The limb brought down nearest to the butt had the most spent wood. Watershoots were wild growths that grew straight upwards, and if they bore fruit they were weighed down and produced cross limbs.

The main trouble in pruning was to know how much spent wood to remove. Some growers took from the butt right to the end of the limb, while others removed only a percentage. Pruning should be done from the butt outwards. Where shoots were level it was possible to tell the old ones: they were dark and the new shoots were lighter in color.

PROFESSOR YOUNG RETURNS.

Research in Shipping Citrus.

After a year's intensive research work, Prof. W. J. Young, Associate Professor of Bio-Chemistry at the Melbourne University, returned to Melbourne on March 1. During his stay in England he conducted research in the shipment of Oranges and other fruits, working principally at the Food Industries Board's laboratories at Cambridge and at the market at Covent Garden.

Maturity tests, packing and transport conditions and general carrying capacity were studied, as well as certain phases of bio-chemistry from a pathological point of view.

Although Prof. Young states that no very definite results have been obtained to date, indications for future work are promising, and his official report will be awaited with interest as well as a continuation of research along similar lines at the Melbourne University.

Small Boy (seeing father manuring garden): Now I know why flowers grow—they want to get out of all that dirt.

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AUSTRALIAN CITRUS TREES.

Big Overseas Demand.

The demand for citrus trees from N.S.W. nurserymen has been steadily increasing during the past three years, and a heavy inflow of orders from overseas this year will not be fully met, owing to some of the nurseries having suffered severe loss by a cyclone that swept through the Ermington and Pennant Hills district during January last. The big demand comes from India for Orange trees raised in the Sydney area, while orders from China, Europe, and America are constantly increasing. This is due to the fact that Australian trees withstand climatic changes very favorably, and can be exported at almost any period of the year.

Most of the citrus trees exported are grown in the Ermington, Carlinford and Pennant Hills districts.

GRAPEFRUIT FOR RELIEF.

Government Buys Surplus.

The major Grapefruit producing areas in U.S.A., whose production in an average year is 15 million boxes, last year produced over 27 million boxes and created a surplus that could not be absorbed in the ordinary channels. The Government undertook to buy vast quantities of the fruit for distribution in their relief schemes. This was presumed to encourage Grapefruit consumption as well as to take off the market surplus quantities that would otherwise have caused an almost total collapse of prices. The States most benefiting by this action are Florida, California, Texas and Arizona.

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Tractors and Horses

Comparison of Costs, Work and Care.

IN a paper read to the Hilltown branch of the South Australian Primary Producers' Association recently, Mr. L. S. Duckmanton outlined a comparison of costs, work and care between the use of tractors and horses. Our report is taken from the "S.A. Journal of Agriculture."

Costs.

From a point of view of costs, which is at all times a primary consideration, the tractor has a slight advantage over horses, in so far that on the small farm there is necessarily so much time that the horses have to be fed when they are not actually working. During April (part), May and part of June, I cultivated twice, 100 acres of land, ploughed 25 acres, and then sowed and harrowed the 100 acres for the cost of £8/15/- for kerosene, £1/5/- for petrol, and £2/12/- for oil, making a total cost of £12/12/- with the tractor. To feed ten horses for the same period (eight weeks) would need nine tons of chaff at £2/10/- per ton, making the cost of horse feed £22/10/-. That is feeding on chaff alone with the addition of crushed oats; of course the amount of chaff used would not be so great, but the cost of the crushed oats would quite make up the difference.

Labor.

The labor attached to feeding a team of horses is greater than some people realise. There are so many handlings of the feed. It has to be cut with the binder, stooked, carted to stack, unstacked and carted to chaffcutters, chaffed, fed to horses, and finally carted out of the stable, which totals seven times handling. For a team to do well it is also necessary for them to be groomed, and that also is ¾ to 1 hour's work every morning. With the tractor the fuel or feed is simply pumped into the tank and when used is blown into the air. Of course the tractor has to be cleaned periodically. This is a few hour's work also, but it is not an every day job.

The tractor is a decided adjunct to the man on the small farm, as it allows him the time to do the hundred and one odd jobs that have to be done in the daily life of every farmer and still get his work done in good time. When he is working horses such jobs have to wait, in lots of cases, except the very pressing ones, until the job in hand is completed. Then they have accumulated so much that it is a day or perhaps several days' work to get them out of the way.

Care.

There is one aspect of the position that is made very clear to the owner of a tractor, and that is abuse. There are often times when horses are overloaded, or worked in unfit condition —in some cases extremely so, otherwise there would be no need for such an organisation as the S.P.C.A. This is a condition that cannot be met with when tractors are working, because if the machine is not in perfect working order it will not work well for long and when overloaded will soon "give up the ghost." If a farmer neglects to keep his tractor in good repair he is laying up trouble for himself, in that when the machine refuses to work any longer through neglect, the repair is much more costly than if attended to when the fault is first noticed.

Side Lines.

There is more scope for sidelines on the small farm when one has not to think of feed for a team. There is always a certain amount of hay to be cut on any farm with tracks and roadways through the crop, which can be fed to stock other than horses. It does not need a great deal of hay to feed a few cows or sheep through the pastureless time of the year, and either cows or sheep repay the time and feed used in subsistance during those few months of the year.

Whereas a man may become car less and neglect a team of horses a get away with it for a time, careles ness with a tractor very quick brings disaster. One soon learns be on the alert at all times for sig of the wear which must from time time take place in the machine whi is working under a load all the tim and one attends to it before the we in one part sets up trouble in so other part, making repairs double a sometimes much more costly.

The greatest disadvantage with tractor is the old enemy "deterior tion" and the inability to offset with natural increase, as is possib in the case of horses. One cann breed tractors, but with horses o can usually breed at least one foal year and so keep the team young a efficient, beside after some years b ing able to sell one horse a year.

CAR SALES UP IN 1936.

One of our regular advertise Preston Motors Pty. Ltd., advise th retail sales of Chevrolet and Bui cars for the twelve months of 19 in the metropolitan area of Melbour indicate that Chevrolet sales were 27 per cent., and Buick 33.3 per ce over 1935, representing 1,656 Che rolet passenger cars as again 1,3 for 1935, and 401 Buicks as compar with 300 for 1935.

The used car sales also show marked increase in volume compar with 1935, when 1,201 used cars we sold, as against 1,514 for 1936.

Chevrolet and Buick are in a b ter position to start the new ye than ever before, and the fact that Chevrolet factory has planned to s a total of 1,200,000 new cars duri this year is indicative of the ra recovery which has been made in t motor industry during the past t years.

GEAR CHANGING SIMPLIFIED

General Motors-Holdens Ltd. advi that gear changing is simple in t 1937 Vauxhall 14. Feeling for t gear is unnecessary. The automa checking device makes it impossi to clash the gears, however quic they may be changed.

The distributor with its Octa Selector enables you to advance or r tard your ignition to secure the ma mum power and mileage from wh ever grade of petrol you use, an ec nomy feature almost exclusive Vauxhall in its price class."

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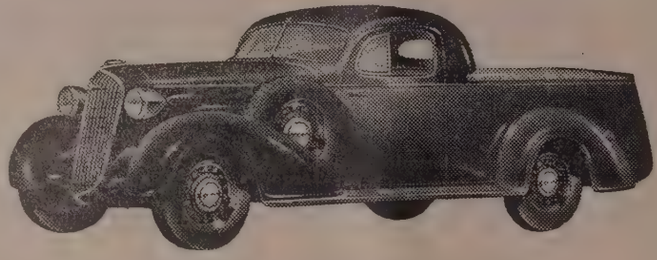


Illustrated is the Chevrolet "6" Open Delivery with Coupe Front.

When you own a Chevrolet Utility it saves you money—on the day you buy and every mile you drive. The fact that Chevrolet is the lowest-priced full-sized utility is your first saving. Then, you'll find that Chevrolet is the lowest consumer of oil and petrol you've ever had. Next, you'll realize that Chevrolet is the most powerful in its price-class. And, finally, when you own a Chevrolet, its utter dependability, long life and low maintenance cost will satisfy you of your wisdom in buying it, as it has satisfied more than two million owners throughout the world. Before you buy your next utility come in and try the latest 1936 Chevrolet.

Chevrolet Trucks Win Praise of Their Owners

Read What This Owner Says :—

"In 1930, I bought a 6-cylinder Chevrolet truck, and I think it only fair to tell you of the wonderful run I've had with it. After 85,000 miles of gruelling work, it still gives 15 to 16 miles to the gallon with a 30 cwt. to 2 ton load over a 'give and take road.' A gallon of oil does for from 900 to 1,000 miles, and repairs to date have cost less than £5."—A.W.U., Corowa.

The Chevrolet engine is a real worker, built for long life and hard toil. Its full-length cylinder-cooling, thermostatic heat control, crankcase ventilation, spray-cooled exhaust valves and pressure steam lubrication are among the features which make it the longest-lived of truck engines. The Chevrolet engine is built to last the life of the truck. Chevrolet Trucks range from the popular 30-cwt. model to the 5-ton Mapleleaf semi-trailer.

Six Cylinder
CHEVROLET
Long Life

Sold and Serviced by Chevrolet Dealers throughout Australia.

Metropolitan Distributors:

PRESTON MOTORS PTY. LTD.

114 Franklin Street, Melbourne

Causes of Overheating

Fan or Fan Belt May be Faulty.

There are many reasons for engine overheating, but it is obvious to anyone that a radiator cannot act efficiently if air cannot pass freely through it. In many instances the cause of overheating may be a faulty fan or loose fan belt.

On some cars the fan blades are made of sheet metal and are liable to become bent. If they lose their "set" they will not be capable of creating an air current strong enough to cool the engine. They should be examined occasionally and if they appear to have flattened out, they should be carefully reset to the original angle.

Sometimes the fan pulley is fitted eccentrically on the shaft and sometimes on an arm which can be adjusted. A popular modern design to run the dynamo from the fan be the position of the dynamo bei made adjustable so as to alter t tension of the belt. A "V" belt shou not be run too tightly or it will so wear out. Only the sides of the "V should touch the flanges of the pu ley and the belt should not bed dow on to the hub of the pulley itself. belt which is found to be bedded do should be renewed, as it is probab badly worn.

During the Winter, the cooli system is not called upon to deal wi the same amount of heat as in t Summer months, and therefore a slight defect in fan or fan belt m more readily become too light at th time of the year.

Export & Commercial News

Tasmanian Fruit Export

MARCH SHIPPING PROGRAMME.

Tasmanian Fruitgrowers are asked to note the following Fruit Shipping Programme for the Month of March.

o be delivered on Hobart Wharf.	Steamer or Motor Vessel.	Discharging.	Due date U.K. or Continent.
ruary 27	"Port Hardy"	Hull, London, Liverpool	April 22
rch 3	"Maimoa"	London, Liverpool	April 30
4	"Maloja"	London	April 16
6	"Esperance Bay"	Southampton, Hull	April 19
6	"Ascanius"	Liverpool, Glasgow	May 1
ort Huon			
rch 6	"Port Sydney"* (Apples)	Rotterdam, Hull, London	April 30
bart, March 9	"Port Sydney" (Pears)	London	—
rch 10	"Brisbane Star"	London, Liverpool	April 23
11	"Orontes" (Apples)	London	April 22
11	"Orontes" (Pears)	London	April 22
17	"Ceramic" (Apples)	London, Liverpool	May 7
17	"Ceramic" (Pears)	London	May 7
be advertised	"Perthshire"	Hull, London, Glasgow	May 8
rch 20	"Jervis Bay"	Southampton, Hull	May 3
24	"Empire Star"	London, Liverpool	May 10
24	"Orama" (Apples)	London	May 6
24	"Orama" (Pears)	London	May 6
25	"Otranto"	London	May 22
be advertised	"Somerset"	London, Hamburg, Liverpool	May 19
ort Huon			
arch 25	"Mahana" (Apples)	Antwerp, Hull, London	May 20
bart, March 27	"Mahana" (Pears)	London	—

Programme for April and May will be issued subsequently * Loads Port Huon as well as Hobart.

APPLE AND PEAR EXPORT.

Prospects Reasonably Good for 1937.

Prospects for Australian Apples and Pears in U.K. in 1937 were reasonably good, stated a well-known fruit exporter recently.

One satisfactory feature was the small carry-over of American fruit in Britain. However, because of the large stocks of English Bramleys in store the outlook for cooking types of Apples was not so good. Many growers were wondering what they would do with the Dunns variety, which were not wanted in U.K., although there was previously a good trade on the Continent with this variety.

It is believed that the forward sales of Australian Apples to British and Continental buyers were up to the average of last season. Some increase had occurred in sales to Scandinavian countries. It was expected also that Czechoslovakia and France would buy Apples on the British market, which would, of course be helpful in clearing stocks.

APPLES GIVEN GREATEST SPACE.

Survey of U.S.A. Shops.

In a recent study made of methods dopted by retailers in some of the rgest American cities, it was found at Apples and Oranges are accord- 95 per cent. of the space given to uit display. Apples received more space than any other fruit in 48 per cent. of the shops studied and only 12 per cent. of shops gave Apples a secondary place.

In the displays seen, bins were the most popular form of display, with windows second, 43 per cent. of shops favored window displays. It must be remembered that there are very few purely fruit shops in U.S.A., the usual method of distribution being a fruit section in a general food or grocery store, therefore window space is the more valuable and the fact that fruit is accorded such provision suggests a desire to stimulate the trade of this department or to draw attention to the freshness or variety of these goods.

95 per cent. removed the fruit from the boxes for display purposes; 75 per cent, sold Apples by weight, and 25 per cent. sold by the dozen.

GERMANY CONTROLS FRUIT IMPORTS.

Reports state that Winter supplies of German grown fruits are light this season, but good crops of Cherries and Plums are predicted as likely to be available for canning. Even so, this will not sufficiently offset reduced supplies of local Apples and Pears.

Under Government regulations, all imports must be approved by the Monopoly Department, which issues certificates to approved merchants. This Department also fixes buying and selling prices, which must be observed.

Larger importations of dried Prunes from Jugoslavia and citrus fruits from Mediterranean countries, on a compensation basis, are forecast.

THE PORT OF LONDON.

The Australian representative of the Port of London Authority advises that 59,752,432 tons of shipping used the Port last season—over a million tons per week. The reason given is that the population of the South-east of England is increasing so rapidly: one evidence of which is the large number of factories installed in the valley of the Thames last year. Within economical delivery of 100 miles from London, there is a population of over 18,000,000 people.

The Port of London Authority relieves merchants of much responsibility, in that it receives all produce from the vessels and renders all the services required in the course of marketing and delivery.

FREIGHT FOR MANCHESTER.

The Australian representative of the Port of Manchester (Capt. W. J Wade) reports that the S.S. "Turakina" has been allocated to load refrigerated and general cargo for Manchester. The ship will sail approximately as follows:—

S.S. "Turakina": From Sydney, March 2; Melbourne, March 6; Adelaide, March 11; Fremantle, March 17.

The "Turakina" will proceed via Cape of Good Hope—due Manchester about May 5.

THE PORT OF LIVERPOOL.

Increase in Foreign Shipping.

The annual report of the Mersey Docks and Harbour Board for the year ended July 1, 1936, is to hand. Australia's shipments to the west coast of England are increasing, as are also loadings from other overseas countries. An indication of this is seen from the fact that the number of deep-sea ships discharging at Liverpool during the year under review was 3,987, as against 3,908 in the previous year. This represented a ship tonnage of 13,174,224 tons and 12,956,664 tons respectively, and has only been exceeded twice, in 1927 and 1930. The Board reduced dock rates by 2½ per cent. and Harbour rates by 15 per cent. during the year.

Liverpool offers many facilities for overseas shippers and feeds extensive markets in the many large distributing centres within easy access of the port.

Margetson & Co. Ltd.

Fruit Importers and Salesmen

30 James St., Covent Garden, London, W.C.2.

WAREHOUSES IN JAMES STREET AND 11-13 NEAL STREET.

Branches at—7, Stony St., Borough Market, London, S.E., and 37, Victoria St., Liverpool.

Sales by PRIVATE TREATY. Prompt Returns and Settlements.

Tel. Add.—Frutero, London; Margetson, Liverpool.

Head Office—Covent Garden Market, London, W.C.

Bankers: LLOYD'S BANK LIMITED, Law Courts Branch, Strand, London, W.C.

SHIPPING NOS.: 431, 432, 557 and 872.

F. CHILTON

ESTABLISHED 1894

FRUIT COMMISSION AGENT

Licensed under Farm Produce Agents Act

Highest Market Prices — Prompt Returns — Reliable Advice

Registered Address for Telegrams and Cables, "CHILTONS"

References :— Bank of N.S.W., Haymarket, Sydney and Growers throughout Australia

CITY FRUIT MARKETS, SYDNEY

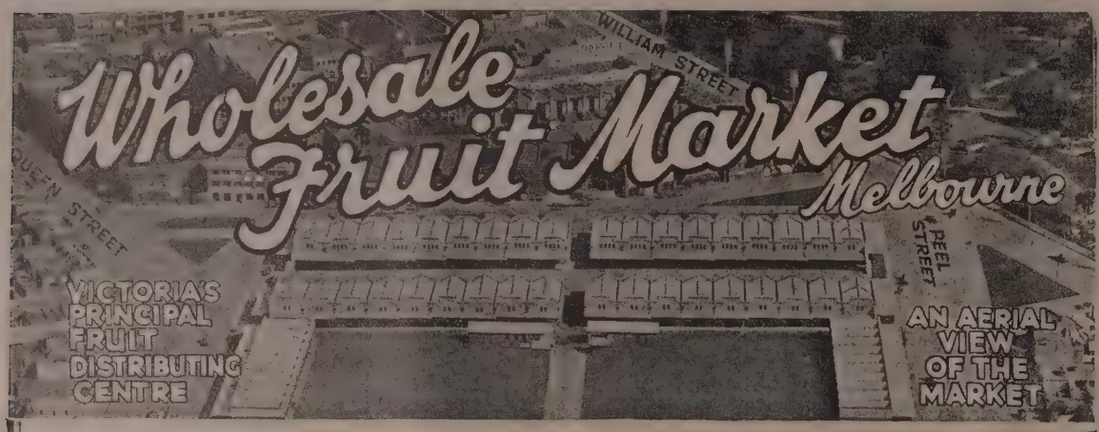
RESEARCH OFFICER FOR LONDON.

Dr. T. H. Harrison Appointed.

Dr. T. H. Harrison, formerly lecturer in botany and entomology at Hawkesbury Agricultural College, Richmond (N.S.W.), has been appointed by the Commonwealth Government to the position of fruit inspection and research officer, London. He will continue the important work initiated on behalf of Australian fruitgrowers by Mr. W. M. Carne, who was on loan from the division of plant industry of the Council for Scientific and Industrial Research.

Dr. Harrison will be attached to the staff of the High Commissioner, Australia House, London. He will be required to furnish reports on the condition of fruits on arrival in the United Kingdom and to suggest remedies for their betterment. He will also be required to co-operate with the various trade interests concerned, with Commonwealth and State inspection staffs in England, and with officers of the British Food Investigation Board.

After visiting the principal fruit-growing districts, Dr. Harrison is expected to leave for London at the end of March.



Cable Address: DAVIS, MELBOURNE. Code: "ABC," 4th and 5th Editions. Box, G.P.O. 148B.

J. DAVIS PTY. LTD., *Fruit Merchants*

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Consignments solicited. One Trial Invited. Best Prices obtained. Prompt Advice and Payment.
Telephone, F 3232. Bankers: The National Bank of Australasia, 271 Collins Street, Melbourne.

Telegraphic Address: "Listeria," Melbourne. Postal Address: G.P.O. Box 555D. Telephone: F 6341.
Codes: Bentley's A.B.C., 5th Edition. Private: Windsor 4535.

GEO. LISTER PTY. LTD. (Managing Director: J. R. VAIL)

Selected Agents for all Growers' Organisations Throughout the Commonwealth.
Wholesale Fruit Merchants — Licensed Commission Agents — Importers and Exporters.
No. 12 WHOLESALE FRUIT MARKET, MELBOURNE.

Having carried on a successful business for over half a century, our name stands high in the Wholesale Fruit Trade of Australia. Our spacious premises at Melbourne Wholesale Fruit Market are admirably adapted for the conduct of our large business, and growers are assured that our best efforts are always at their disposal.
Bankers: Commercial Banking Co. of Sydney, MelbourneBranch. Fidelity Bond Guaranteed by I.O.A. Insurance Co.

Silbert, Sharp & Davies
Pty. Ltd.
FRUIT MERCHANTS
17 Wholesale Fruit Market
'Phone: F 2287.

REGULAR SUPPLIES OF GOOD FRUIT, WELL PACKED AND GRADED, BRING THE BEST RESULTS.

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J. W. ROSS
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Prompt Returns and Sales Notes Daily.
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G. WOOLF
29-30 Wholesale Fruit Market
WHOLESALE FRUIT MERCHANT & COMMISSION AGENT
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SHIPPING No. 41. PROMPT SETTLEMENTS. CONSIGNMENTS SOLICITED.
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PTY. LTD.
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Stencil or Labels on application.

CONSIGN YOUR FRUIT TO
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Wholesale Fruit and Produce Commission Agents,
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Branches 141 Little Bourke Street and Victoria Market.
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Assured Highest Market Rates.
P. A. PATRIKEOS
36 Wholesale Fruit Market Melbourne
Telephone: F2227.

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(Established 35 Years)
No. 44 WHOLESALE FRUIT MARKET, MELBOURNE.
Growers in all States are invited to send consignments. Highest market rates and prompt settlements.
Telephone: Store F4874;
Bankers. Private F1555 & F8711.
Commonwealth Bank of Australia.
£500 Fidelity Bond Guarantee.

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Established 1893.
Member of Wholesale Fruit Merchants' Association of Vic.
14 WHOLESALE FRUIT MARKET, MELBOURNE.
Consignments Solicited from all States.
Growers Will Receive Top Market Value and Prompt Returns.
Fidelity Bond Guarantee for £1,000
Pea and Bean Stands,
11 and 12 Victoria Market.
Reference—E.S. & A. Bank.
Elizabeth St. Branch, Melbourne.
Phone: F 5035.

Fruit Prices in the Sydney Marke

Survey of Operation for the Pe January 23 to February 25, 19

Late Plums and Small Apples C spicuous :: Export of Apples, Pe and Plums Commences :: Grapes William Pears Seasonal Des Fruits :: No Preference for La Bananas :: Inland and Inters Tomatoes Available :: Ripe Mel in Surplus Supply.

By L. T. Pearce, Market Represe tive, Fruitgrowers' Federation N.S.W.

THE CHIEF FEATURES of month have been the disp of Williams Pears, the arr and slow disposal of small Ap and the large quantity of late va ties of Plums that arrived from Orange district. Consideration these three types of fruit o shadowed all else, including even increasing supplies of Grapes came to the market. The quality quantity of Williams Pears and reasonable price at which they w available to the public, once n provided a prominent dessert art for the table and the comparati heavy arrivals were steadily pus out in the endeavour to prevent an cumulation of ripe fruit.

The end of January gave pron of a scarcity of well-colored Ap and, at that early date, Apples wh out color were inclined to accu late at the existing prices. As month of February progressed, h ever, small eating Apples lacking color arrived in perplexing quantit and the accession of the Jonathan sulted in steadily reducing prices the deposed McIntosh Red and Grav stein.

The surfeit of small Apples was aggravated by the market receiving those types that were rejected in the process of packing for export, which commenced with the departure of "Oronsay" on February 13 with 5, cases, the "Australia Star" follow on the 16th with 2,969 cases Apples, 10,232 boxes and crates Plums, and 1,490 cases of Pears. "Orion" left Sydney on the 24th stant with approximately 7,000 c of Apples, while the "Idomeneus" loading at the time of going to pr This exported fruit which came fr most districts in New South Wa provided a happy release for the S ney market, as seasonal conditi have made most early types of Ap small in size, and many of them ficient in the expected color.

Considerable inconvenience caused to growers and shippers of fruit due to the refrigerat machinery of the "Bitterfeld" countering trouble, so that the s was withdrawn from fruit exp operations.

Tropical fruits enjoyed steady mand, the supply of Bananas f N.S.W. comprising 80 per cent. sizes 8in. and 9 in., the resultant p of the large fruit being frequen no better than that of 6in. and 7 fruit.

Growers of melons must have perienced some disappointment u receiving low prices for their Ca loups, Californian Cremes and R Melons, which ripened even m rapidly than usual, with the re that some wastage occurred in markets and vendors were compe frequently to repack the product. surplus of ripe fruit being obvious frequenters of the market would the impression of supplies be greater than was necessary, and

aintenance of values would be diffi-lt.

Tomatoes have not been in excess pply, and local supplies gave place those from Victoria and Queens-ad, and also from most inland dis-ricts of N.S.W., all varieties and alities being represented in the pro-ct presented for sale.

Seasonal conditions enabled almost 0 per cent. of the late varieties of ums produced in the Orange district be marketed, and for the first time r some years it has been possible estimate how large a normal crop Plums from this district is. The uantity provided a problem for ven-ors who, instead of experiencing astage and requiring to repack the roduct, had the greater difficulty of ersuading buyers to take more than ney required.

The market during the month has eceived more fruit than for any eriod since the October surplus of ranges, and, in regard to Apples, ne position is reminiscent of the sur-us quantity of fruit at this period in 935.

Apples.

Being the only colored Apple, Gravenstein had preference late in January, but early in February were neglected in favor of McIntosh Red and Jonathan. The absence of maturity in those types, however, drove buyers back to the Gravenstein, the Jonathan superseding that variety after the middle of the month. Clearing sales are now being attempted by agents to dispose of the surplus Gravenstein, McIntosh Red, colorless and hail-marked Jonathan and Fanny and Cleo. that were rejected for ship-ping purposes. Reports indicate that Jons. are likely to continue small in size, most arrivals being of size 2¼ in. and 2⅜ in.

Queensland forwarded a few Jon. and Delicious early in February, these realising to 11/-, which was a little better than the price of local fruit. Latterly Tasmania commenced to for-ward Worcester Pearmain, the size of this fruit enabling quick disposal. It is anticipated that there will be a greater percentage than usual of hail-marked Apples appearing from N.S.W. Prices:—Quoting in three groups for Special and Standard Grades, (1) 3 in. and over, (2) 2⅜ in. and 2½ in., and (3) 2⅜ in., and 2¼ in.—Cleo. (N.S.W.) 4/6 to 6/-, 3/- to 4/6; Fanny (N.S.W.) 5/6 to 7/-, 3/6 to 6/-; Grav. (N.S.W.) 4/6 to 7/-, 4/6 to 7/-, 2/6 to 5/-; Granny (N.S.W.) 6/- to 8/-, 4/6 to 6/-; Jon. (N.S.W.) 6/6 to 8/-, few higher, 5/- to 8/-, few higher, 2/6 to 6/-; King David (N.S.W) 6/- to 7/-, 5/- to 7/-, 3/6 to 6/-; Londons (N.S.W.) 5/- to 7/-, 4/6 to 6/-, 3/- to 4/6; Worcesters (Tas.), 4/6 to 6/6, 5/- to 6/-; McIntosh Red (N.S.W.), 5/- to 7/-, 5/- to 6/6, 2/6 to 5/-. Plain and "D" grade lower. Jam price, 1/6, Jon. and Granny 2/6.

Pears.

At the end of January most N.S.W. districts were forwarding Williams Pears and arrivals from Victoria were increasing. Weekly arrivals from the Southern State reached their peak last week, when more than 21,000 cases arrived, but supplies are now decreasing. It is estimated that cool-stores in Sydney hold approximately 50,000 cases, while the various country cool-stores in New South Wales are practically full and, as a result, Williams Pears are expected to be plentiful over March. The select committee of Victorian agents have endeavoured to hold the price by collaborating with each other and at the same time preventing over-ripe fruit accumulating. The Williams has been of excellent quality from all sources and almost entirely free of Black Spot, Codlin Moth and other defects.

Small consignments of Packham's, B. Bosc, B. Caps, and Howell have appeared, but their value has been purely nominal, as the Williams was the favorite. Prices:—Quoting in three groups for special and standard grades, (1) 3 in. and over, (2) 2⅜ in. and 2½ in., and (3) 2⅛ in., 2⅜ in., and 2¼ in.—Williams (Vic. and N.S.W.), 5/- to 7/6, special N.S.W. to 8/6, 5/- to 6/6, 4/- to 5/6; Plain and over-ripe lower.

Apricots.

N.S.W. finished its crop by the beginning of February, but several consignments of approximately 800 cases arrived from Tasmania, these realised from 6/- to 8/- per half bushel.

Bananas.

Arrivals on the Sydney market for the period under review aproximated 64,800 tropical cases, N.S.W. supplying 58,000 of these, Queensland 6,000, with approximately 560 cases from Fiji on January 26. This average of less than 12,800 cases per week was almost 3,000 cases less than for the same period last year. As the month progressed the large proportion of 8 in. and 9 in. fruit resulted in those sizes being sold frequently as a similar figure to 6 in. and 7 in. fruit. The Fiji fruit was offered at 19/- to 22/- per tropical case; the fruit being of particularly good keeping quality. Prices of N.S.W. fruit, according to the Banana Marketing Board of N.S.W., are 14/- to 18/- for all sizes.

Citrus Fruits.

Grape Fruit. — Only one N.S.W. brand has been observed on the Sydney market, sales being effected from 10/- to 20/- per bushel. A consignment of the U.S.A. Grapefruit arrived on January 23 and was quickly cleared at 45/- per Californian case.

Lemons.—Very little fluctuation was experienced in the prices of Lemons, supplies unexpectedly appearing from coastal regions. Interstate consignments were not considerable, as values were uncertain, the present ruling prices are as follows:—N.S.W. — Special and Standard—Counts colored 88 to 96, 6/- to 8/-; counts 113 to 150, 9/- to 12/-; 163 to 252, 11/- to 14/- per bushel. Plain grade, 5/- to 7/-; Inland 10/- to 15/- per bushel; green, 8/- to 12/-; Vic., 9/- to 15/- per bushel.

Valencias.—Very little alteration was experienced in the prices of Valencias, although the absence of special quality fruit of popular size made sales sometimes difficult. Leeton, Griffith and various coastal areas forwarded steadily, counts 88 to 138 seldom realising a price which would necessitate the retailer selling above 1/- per dozen. Large fruit is green and some of it extremely coarse, and, in the process of scrubbing to remove Red Scale, some damage resulted. Present prices are as follows:—Local, counts 88 to 138, 6/- to 8/-, few 9/-, 150 to 198, 8/- to 11/-, few special higher, 216 to 270, 6/- to 10/- per bushel. Plain grade, 4/- to 7/- per bushel; Inland, 6/- to 11/-, few higher per bushel. Two bushel crates: Inland, plain 11/- to 12/-, standard 12/- to 14/-, special 14/- to 16/-.

Figs.

Small consignments only have appeared, prices ranging from 3/- to 5/- per quarter bushel case.

Grapes.

By January 26 stocks of metropolitan Grapes had increased to such an extent that supplies were not always cleared. These varieties comprised the Black Hamburg and Black Muscat, the White Muscat not appearing until February 2, and at no time appearing in any quantity. Early in February it became obvious that drought conditions would cause most Grapes to be smaller than usual, although the setting of the Black Muscat bunches was particularly good, so that they resembled the Black Hamburg in appearance. Gordo, Waltham Cross and Black Muscat appeared from the M.I.A. on February 10, but due to immaturity, Gordo and Black Muscat temporarily ceased to arrive. On February 15 the Young district commenced to forward Black Muscat, the fruit being particularly fresh in appearance, although at that date lacking in sweetness. At the time of going to press Young is forwarding more heavily and Purple Cornichon have appeared from the Murrumbidgee Irrigation Area, while the marketing of metropolitan Grapes is now well advanced, the Black Hamburg nearing the end of its season. There have been occasions when this fruit did not move with the freedom that was desired and inferior quality was difficult to sell, even at 2/- per box. Choice Black Muscat on an average realised 5/- to 7/-, and Black Hamburg around 4/-, special White Muscat in a few isolated instances sold to 15/-, but quality usually prohibited that figure being obtained. Prices:—N.S.W.—Local, Black Hamburg 3/6 to 5/-, few 5/6 per half bushel; Inland, Purple Cornichon, 4/6 to 6/- per half bushel. Black Muscat, local 5/- to 6/-, special to 7/6; inferior from 3/6 per half bushel; Inland, 3/6 to 5/- per half bushel; White Muscat local, 5/- to 8/-, few to 10/- per half bushel; Gordo Inland, 3/- to 5/- per ½ bushel. Sherry — Local 4/- to 5/- per half bushel. Waltham Cross—Inland, 4/- to 6/- per half bushel.

Melons.

Queensland was forwarding over 1,000 tropical cases per month until the beginning of February, when metropolitan and M.I.A. grown fruit appeared. Values frequently were definitely unpayable, and the clashing of inland supplies with those locally grown was unfortunate, the local fruit apparently being profitable, when sold at 4/- and 5/- per case. Prices:—N.S.W., Local Rock Melons, 2/- to 4/- per tropical case; Inland, Cantaloups, 3/- to 5/-; Hale's Best, up to 8/-; Californian Cremes 3/- to 5/-, special 6/- per tropical case.

Nectarines.

The end of January witnessed this fruit increasingly heavy in supply, and at the beginning of February sup-

F. Chilton, Established 1894.
Fruit Commission Agent,
Licensed Under Farm Produce Agents' Act.
Highest Market Prices, Prompt Returns, Reliable Advice.
Registered Address for Telegrams and Cables—
"Chiltons."
City Fruit Markets, Sydney.

FRUITGROWERS!
For Satisfactory Results, Send Your Fruit to
F. H. G. Rogers
Fruit Selling Expert.
Municipal Markets, Sydney.
Shipping No. 83. **Established 1900.**

H. P. WOODWARD
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Forwarding Numbers:
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Queensland, Northern Rivers, **No. 18.**

GROWERS!—Consign your Fruit to—
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21 CITY MARKETS, SYDNEY.
Postal Address: Box 36, Haymarket P.O., Sydney.
Established 1882.
SHIPPING NO. 19. 88 VIC. & TAS.
Stencils, Advice Notes, etc., on Application.

CONSIGN YOUR FRUIT TO
HOPKINS & LIPSCOMBE
Proprietor: STANLEY H. POGSON.
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PROMPT RETURNS. SHIPPING NOS.—
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Shipping and Consignment Numbers.

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GROWERS—Consign your FRUIT & VEGETABLES to
F. G. STEVENS and Sons
Licensed Farm Produce Agents.
Head Office: 3 QUAY STREET, SYDNEY.
Sales Personally Supervised. Prompt Advice and Returns. SHIPPING NO. 127.

plies were arriving from the M.I.A., Young and Orange. Good values were received most of the season, breakdown not generally being of a serious nature. Vic. arrivals were at no time considerable. By February 10 supplies from the M.I.A. had practically ceased, and the Young marketing was well advanced, Orange continuing a little longer. Prices: — N.S.W. Inland 5/- to 7/- per half bushel case, and recently to 10/-.

Persimmons.

These appeared about February 18, and are steadily increasing in quantity. Prices 2/- to 4/- per half case.

Plums.

Only small supplies of choice Narrabeen variety appeared from Young this season, due to seasonal conditions. The last of the Angelina appeared from Batlow, Young and Orange at the end of January, Blue Diamond following and receiving good support until they were displaced by early arrivals of Pond's Seedling and Grand Duke. A few Pond's and Grand Duke came from Young and a few Early President were witnessed from Yanco. The Orange district is recognised as the late Plum district, and by the 15th of the month there was a definite over-supply of all varieties, Blue Diamond becoming definitely unsaleable, while President were regarded as too immature (and have continued so). During the third week of February there was an accumulation of Plums in the market, many hundreds of cases being offered at the jam factory at 1/7 per box. At the time of writing the over-supply of Pond's, Giant Prunes and Grand Duke appears to be over, and it is regrettable that an eagerness to market caused immature President to be loaded on to the market during the glut period, as these Plums are worthy of a better fate Latterly a few October Purple have appeared, and, being a choice dessert plum, have sold up to 8/- per half bushel. Prices:—N.S.W., most sales 1/6 to 3/-, special 4/- to 6/-, October Purple, to 8/- per half case.

Peaches.

Peaches have been in good request throughout the season. Metropolitan supplies finished at the end of January and Elberta from the M.I.A. became the chief arrivals. Lavington, Young and Orange, followed by Bathurst, coming on to the market. M.I.A. Elberta were generally lacking in color Bathurst Elberta were on the market at the beginning of February, the crop only being a light one and prices were to 12/- per bushel. At the same time Vic. supplies were mostly Elberta values being 5/- to 7/-, with a few White Slipstone selling to 10/- per bushel. Very few J. H. Hale's came from Bathurst this year the price being to 8/- per half bushel. Latterly the M.I.A. has forwarded small Golden Queen, the counts being around eleven to thirteen dozen per half case, and realising from 3/6 to 5/-. Supplies are expected to be heavier, due to canning operations on the Irrigation Area. Prices:—N.S.W. M.I.A., 3/6 to 5/- per half case, 5/6 to 8/- per bushel; Bathurst, 6/- to 8/-, few higher per half bushel. **Victoria,** 6/- to 9/-, few 11/- per bushel case.

Passionfruit.

At the end of January values were 8/- to 16/-, and, by the 15th, due to their scarcity, had increased to 20/- and 22/-. Within the week, however, supplies had appeared from Victoria and Queensland, and values quickly receded, becoming 6/- to 9/- with special to 12/- per half bushel case.

Pineapples.

17,030 tropical cases reached the Sydney market from Queensland, and these were mostly cleared at from 6/- to 12/-. Arrivals averaged about 3,406 cases per week.

Quinces.

The quality of local fruit resulted in values varying from 3/- to 6/- whereas inland supplies of choice fruit sold about the middle of the month to 9/-, latterly receding and becoming 6/- to 7/- per bushel.

Strawberries.

Only a few have arrived from the Moss Vale district, the nominal price being 6/- to 12/- per dozen punnets.

Tomatoes.

At the end of January supplies were chiefly from local sources with a few from the M.I.A., Victoria also forwarding a few from the Goulburn Valley. Values were then at 2/- to 4/- per half bushel. At the beginning of February hotter weather caused values to improve and fruit from the Stanthorpe district in Queensland commenced to arrive. By February 8, Vic. Goulburn Valley fruit sold to 12/- per bushel, and local supplies to 9/- per half bushel. Arrivals are now reaching the market from the Goulburn Valley, Dandenong and Portland in Victoria, the latter fruit being of very special quality, while N.S.W. is forwarding from the M.I.A., Lavington, Bathurst, Orange and Mangrove Mountain. Queensland is forwarding between 5,000 and 7,000 cases per week. Present values are as follows:—N.S.W., 4/- to 8/-, few higher per half case (M.I.A. 4/- to 7/-, Queensland, Stanthorpe 4/6 to 6/- per half case. Victoria 7/- to 11/-; Portland to 13/- per bushel. Repacked, 6/- to 8/- per half bushel.

CYCLONE LEVELS YOUNG TREES

A cyclone which swept along a narrow path on the outskirts of Sydney in the latter part of January, did an immense amount of damage to some nurseries.

In the Ermington area, besides creating havoc in private gardens the wind levelled fruit and citrus trees on the properties of several professional nurserymen. In one instance not one tree was left standing on twenty-two acres, and years of work was nullified in six minutes.

Herbert Wilson Pty. Ltd.

WHOLESALE FRUIT MERCHANTS AND COMMISSION AGENTS

Nos. 1 and 10, Wholesale Fruit Market, Melbourne.

Accredited Agents for Victorian Central Citrus Association and Affiliated Association.

City Telephone: F 6444. Private Phone: M 3055.

Bankers: National Bank of Australasia (Western Branch), Melb.

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BRISBANE FRUIT MARKETS

ROBSONS LIMITED
(Wm. Robson, Managing Director.)
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FRUIT EXCHANGE, BRISBANE, QUEENSLAND.
Account Sales and Cheques Sent Promptly.
Shipping No. 28.

FRUIT GROWERS—
PLEASE TAKE NOTE—If you are not one of the fortunate ones, consign your fruit to
CLARK & JESSER
Fruit Exchange,
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and be amongst the well satisfied.
Reliability is Our Motto.
Tasmanian Forwarding No. 49.
Others, C. & J.
Satisfaction Guaranteed

Highest Prices. **A. S. BARR** Prompt Returns.
FRUIT EXCHANGE, BRISBANE, QUEENSLAND.
Wholesale Fruit Merchant and Growers' Agent.
A Trial Solicited. Returns Speak for Themselves. Shipping No. 19.
Established 1888. Registered Telegraphic Address: "Barr, Brisbane."

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SHIPPING NO. 12. GROWERS' AGENTS.
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BEST PRICES, PROMPT ADVICE AND REGULAR SETTLEMENT.
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Good Fruit . . .
WELL GRADED AND WELL PACKED ALWAYS FINDS A READY SALE IN QUEENSLAND.

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WHEN FORWARDING FRUIT USE AGENTS' CONSIGNING AND SHIPPING NUMBERS.

Do not run any Financial Risk with your Fruit but Consign it to
HEDLEY GEEVES PTY. LIMITED
Telegraphic Address: "Apples, Brisbane." (Hedley Geeves, Managing Director) Registered Shipping No. 6.
FRUIT EXCHANGE——BRISBANE
SELECTED AGENTS FOR:
Victoria: Harcourt Fruitgrowers' Progress Assn. Ltd.
Harcourt Fruit Supply Co. Ltd.
Victorian Central Citrus Assn. Ltd.
Tasmania: State Fruit Advisory Board.
New South Wales: Griffith Producers' Co-op. Co. Ltd.
Batlow Packing House Co-op. Soc. Ltd.

CTORIAN FRUIT MARKETING ASSOCIATION.

(Continued from page 28)

ts from abroad definitely specified feature.

was decided to direct attention the monthly circular to the fact shipper members had specific in- ctions that Apples for export uld be packed to size and branded ordingly, and not packed to count. ther matters dealt with included e with France, export certificates w admissible in evidence in courts law), the Marketing Referendum ft to discretion of members), Pears export (Lemon Bergamot and P. ry), printed wrappers for export ples and Pears, Farmers' Conven- n (Sale, April 6-8). Favorable re- ts were received concerning the d days at Doncaster and Paken- m Upper.

PRODUCERS' CO-OP. DIST. SOCIETY.

Record Year's Trading.

The Producers' Co-op. Distributing ciety Ltd., Sydney, had a record ar's trading in 1936.

Speaking at the annual meeting in dney on January 22, the chairman, r. W. R. Hindmarsh, said turnover talled £4,124,032, or about £80,000 ore than in the preceding twelve onths. The surplus of earnings over penses—£30,538—was a record for e Society. In addition to a dividend 4 per cent. it would be possible to crease the bonus to 20 per cent. on mmission paid on local sales of but- r on the official quota, and to 12½ er cent. on local sales of other com- odities.

FRUIT FOR FRANCE.

A shipment of 7,000 cases of Vic- orian Apples was sent direct to rance per S.S. "Maloja" early in March by Messrs. Barker, Green and Parke, of Melbourne. The Apples were principally Jonathans and King Davids: plain wrappers were used in packing the fruit.

The trade agreement between Aus- ralia and France provides for a maxi- mum of 60,000 cases of Apples (or Apples and Pears) this season.

Fruit for France can only be sup- plied from orchards certified by the Dept. of Agric. as free from San Jose scale.

BUSINESS CHANGE.

Lee Fook, E. and Co. (William Y. Gee), Municipal Fruit Markets and 13 Lackey-street, Sydney, fruit and vegetable merchants. On 1/2/37 Ed- ward Lee Fook became owner. Reg. 12/2/37.

SYDNEY FRUIT RETAILERS.

Earlier Closing Agreed to.

From April 1, fruit and vegetable shops in Sydney and suburbs will close much earlier than hitherto.

During the hearing of an applica- tion by the Shop Assistants and Ware- house Employees' Federation for an award before the Conciliation Com- missioner (Mr. Baker) yesterday, the parties reached agreement about clos- ing hours.

Fruit and vegetable shops will close at 10 p.m. on Fridays and Saturdays. From April 1 to September 30, the closing time from Mondays to Thurs- days inclusive will be 7 p.m. From October 1 to March 31 the time will be 9 p.m.

WESTERN AUSTRALIA.

There is a record crop of clean highly-colored Apples in Western Australia this season.

Arrangements are well in hand for the export of the State's quota.

It would be a relief to W.A. if the eastern States could get ahead with its Apple publicity campaign to clear the surplus and thus provide for more stabilised markets, both locally and abroad.

The Plum and Quince crops in the Campbell's Creek (Vic.) district were purchased at £7 a ton.

FIRMS IN THE FRUIT TRADE

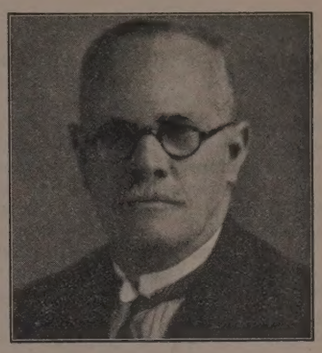
NEW SOUTH WALES.

F. G. Stevens & Son.

THIS old-established firm of growers' agents commenced in Sydney during 1901 in that portion of the old Fruit Markets that is occupied by the Capital Picture Theatre in Hay-street. Mr. F. G. Stevens, senior, who founded the busi- ness, is still in harness, but the duties of management of the sales depart- ment has fallen upon the capable shoulders of his son, Charles F. Stevens, who has proved himself an indefatigable worker in the interests of the firm in handling the growers' produce to the best advantage.

A very large business is carried on with growers in N.S.W., Queensland, and Tasmania, and now the firm are extending their business to other States. Growers can with confidence consign their produce to this firm, who have established a name for fair dealing at the Sydney Markets that places them in the forefront of that body of agents who are affiliated with the Chamber of Fruit and Vegetable Industries.

Mr. Chas. F. Stevens.



Mr. F. G. Stevens.

The firm has been members of the Chamber since its inception, and the slogan "Service With Integrity" is no idle term in the conduct of their busi- ness.

All classes of fruit, with the excep- tion of Bananas, are handled by them, and vegetables such as Beans, Peas, Celery, Tomatoes, etc., are also dis- tributed to retailers.

Producers' Co-operative Distributing Society Ltd.

Are now paying a Bonus of 10% on all Commis- sions charged to regular clients of the Fruit & Vegetable Section for year ending Sept., 1935

Send Your Consignments TO US

MELBOURNE & SYDNEY.

The PRINCIPAL Fruit Merchants and Exporters of SOUTH AUSTRALIA

SILBERT, SHARP & BISHOP LTD.

FRUIT MERCHANTS — EXPORTERS — COMMISSION SALESMEN
BANANA IMPORTERS AND RIPENERS

283 Rundle Street — Fruit Exchange — Adelaide

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Exporters of APPLES and PEARS under "Southern" and "Adam & Eve" Brands

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Growers! Consign your Fruit To

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S. E. Norsworthy & Co.
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FRUIT EXPORTERS AND MERCHANTS
Specialising in Apple and Pear Export.
Proprietors HOME SERVICE STORES, Branch 41.
Phone: Gumeracha 2.

The Soldier Producers Marketing Society Ltd.

"A Marketing Society Founded by Returned Soldier Growers."

Wholesale Fruit and Vegetable Merchants, Growers, Commission Agents, and Exporters.

New Market, Adelaide

The best recommendation we have to offer comes from growers with whom we have done business.

Phone: Day, Cent. 6974. Night, L 5447.

Box 238C, G.P.O., Adelaide.

FOR SALE

"Lightning"
APPLE OR ORANGE GRADER

Will Grade to Size or Count.

Full particulars from—
HORTICULTURAL PRESS,
Box 18a, G.P.O., Adelaide.

Market Notes and Prices

VICTORIA.

Market Report for February.

NORMAL conditions for February prevailed at the sales floors of the Wholesale Markets in Melbourne. Owing to warm weather being passably consistant, sales averages improved and good demands were experienced. Grapes and Melons made their appearance and stone fruits held a fair market.

Citrus.—Very few local Grapefruit were received, prices were comparatively high. One shipment of Californian Grapefruit arrived to a good demand. Oranges sold well to good prices, but supplies were only fair, a shade light for the period. Good Lemons were scarce, and a few medium samples were welcomed. Prices were good up to last week, when water blister appeared and sales and prices eased.

Peaches.—Good samples sold well. Brown rot spoilt larger sales. Again the fruit was being picked immature and stored, resulting in a mealy condition.

Plums.—A few Japanese varieties sold well, but on the whole prices were low.

Pears.—In the first half sales were flat, but improved towards the end, with rising prices.

Apples were very slow right through, with a heavy crop to clean up, prices will not firm for some time.

Grapes.—Gordo and Walthams appeared, quality was good, but not sweet. Prices were fair, and the demand grew with warm weather at the end of the month. A few Mildura shipments brought complaints about carrying quality. Sultanas dropped back.

Melons.—There was a glut for the first two weeks, caused by immature samples not being wanted. Later Cantaloups and Honeydews firmed, and the demand was satisfactory.

Berries. — Raspberries finished early. A fair supply of Strawberries were seen with good prices.

Tomatoes.—Locals were well supplied early in the month with fair prices. Portlands were in demand in the last half, prices droppel in last week. Weather conditions favored sales.

Melbourne (3/3/37). — The following prices were quoted by the Wholesale Fruit Merchants' Association of Victoria:—Per case: Apples, eating, 3/- to 5/-; few higher; cooking, 2/- to 4/-. Bananas, double case, green, best, 10/- to 14/-; few higher. Grapefruit, 12/- to 20/-; selected, 24/-; few higher. Lemons, good quality, 6/- to 13/-. Oranges: Vals., bulk, 6/- to 12/-; specials, 2/- to 4/- higher. Nectarines, 6/- to 8/-; few higher. Papaws, to 18/- double case, Peaches, white, 4/- to 8/- case; few higher; yellow, 3/- to 6/-. Pears, 3/- to 4/-; few higher. Pineapples, 8/- to 11/-; few higher. Passionfruit, half-case, 4/- to 9/-. Plums, 3/- to 5/- case; few higher. Tomatoes, local, 2/- to 4/-; few higher. Figs, half case, 3/- to 5/-; choice higher. Cucumbers, to 2/6. Cantaloups, 3/- to 6/-; few higher. Grapes, 6/- to 12/- case; few higher.

The Melbourne market manager of the Federal Citrus Council of Australia reports that sales yesterday were as follow:—Valencias, average standards, 75-96, 5/- to 6/-; 112-126, 7/- to 8/-; 140-182, 9/-; a few, 10/-; good standards, to 11/-; M.I.A., to 12/-; a few, 13/-; selected, to 14/-; specially selected, large, from 10/- and 11/-; best counts, 16/- and 17/-. Grapefruit, average standards, 12/- to 20/-; selected, to 25/-; specially selected, to 30/-. Lemons, average standards, 10/-; good standards, to 13/-; specials, 1/- to 2/- higher.

WESTERN AUSTRALIA.

Perth (22/2/37). — Apples, Jon., flats, 2/- to 7/-; dumps, 3/- to 9/- (special to 10/9); Dunns, flats, 1/6 to 3/6; dumps, 2/- to 5/-; G. Smith, flats 2/- to 4/-, dumps 3/- to 7/-; Cleos., flats 1/6 to 3/6, dumps 2/- to 5/6 (special to 6/-). Citrus: Vals., flats 3/6 to 9/- (special to 11/-), dumps 5/- to 14/- (special to 15/-). Lemons, 4/- to 12/6 (special to 13/-). Stone fruits: Plums, Satsuma, 2/- to 5/6; Wickson, 2/- to 5/-; Narembeen, to 15/-; other varieties, 3/- to 9/-; Peaches, 6/- to 13/6. Other lines: Pears, Bartlett, flats 2/- to 7/6 (inferior from 1/6); other varieties, flats 1/6 to 3/9; Grapes, open, white, 3/- to 8/9, closed 2/- to 4/-; colored 2/- to 6/6; Passionfruit, 3/6 to 8/6 (special to 10/6); Tomatoes, 4/- to 12/- (special to 13/6, inferior from 1/6).

QUEENSLAND.

Brisbane: — Messrs. Robsons Pty. Ltd. report under date February 17 as follows:—Local stone fruits are getting finished, the best samples of Peaches coming to hand are realising to 7/6, and N.S.W. President Plums to 7/-.

Local Muscat Grapes are selling freely, from 6/- to 7/-, and Waltham Cross to 8/-.

Apples, Local Jon., 8/-, and G. Smiths 7/- to 9/-. **Pears:** N.S.W. Williams, 8/-. **Oranges:** Choice quality are selling from 12/- to 14/6. **Lemons:** Gayandah, 22/- to 24/-; Southern, 18/- to 22/-. **Pineapples:** Rough Leafs 6/- to 8/- per C/S, Smooth Leaf, 6/- and 7/- per C/S. **Passion Fruit:** Best quality, 12/- to 13/-. **Mangoes:** 5/- to 7/- per C/S. **Bananas:** 6's 6/- to 9/-, 7's 7/- to 10/-, 8's 8/- to 11/-.

Brisbane (19/2/37).—Messrs. Clark & Jesser report as follows:—For the past month our market has been well supplied with most lines of fruit and vegetables, and values have remained steady. The ruling prices at present are:—**Apples,** Jon. 7/6 to 8/6, Del. 8/- to 8/6, G. Smiths 8/- to 9/-, Dunns 4/6 to 5/-. **Pears:** W.B.C. 7/- to 8/-. **Oranges:** 10/- to 12/-. **Lemons:** 18/- to 20/-. **Peaches:** 4/- to 5/-. **Plums:** Pon Seedlings 6/- to 7/-, Giant Prunes 5/- to 6/-, Presidents and Grand Dukes 5/- to 7/-. **Grapes:** Muscats 5/- to 6/- case, Black Prince and Ascots 4/- to 5/-, Waltham Cross 7/- to 7/6. **Passion Fruit:** 6/- to 7/-. **Mangoes:** 4/- to 5/-. **Papaws:** 4/- to 5/- dump case. **Pineapples:** Roughs 7/- to 8/- case, smooths plentiful 4/- to 5/- case. **Bananas:** 10/- to 12/-. **Tomatoes:** 4/- to 5/-.

Wet weather has prevailed for the past few days and it is much cooler.

SOUTH AUSTRALIA.

Adelaide (26/2/37). — Apples (eating), 4/- to 6/- case, do. (cooking), 3/- to 4/-; Bananas, 16/- to 18/-; Grapes (dark), 8/-; do. (white), 8/-; Lemons, 8/-; Nectarines, 8/- to 10/-; Oranges (Common), 10/-; do. (Navel), 12/-; Peaches, 6/- to 8/-; Pears (eating), 5/-; Pears (cooking), 3/-; Pineapples, 14/-; Plums (light), 3/-; do. (dark), 3/-; do. (Damson), 5/-; do. (Jap.), 5/- to 6/-; Quinces, 3/-.

NEW ZEALAND.

Dunedin (19/2/37). Messrs. R... Central Produce Mart Ltd., repo... follows:—

During the week the extre... wintry conditions have had a ... mental effect on supplies and sal... fruit. Only small lines of stone ... have been received, and there is ... a great deal of first grade ... arriving.

The majority of consignments ... sists of Plums, Apricots and Pe... being in short supply. Increa... consignments of Nectarines are ... ing to hand. Greengage and Sat... Plums have firmed in price.

Only small parcels of Nelson g... apples are being received, but Ce... Otago grown Worcesters and C... are increasing. Fair consignmen... Bon Chretien Pears are now co... to hand.

There are still fair consignmen... Raspberries being received. How... buyers have secured their req... ments for the season, and value... lower.

Tomatoes are in very short su... only small consignments of out... grown are being received. Price... hothouse Grapes have firmed sli...

Oranges are very short of req... ments, a line of Japanese Navels ... due by the "Sydney Naru" on the ... and a fairly large shipment of ... fornian fruit ex the "Monterey" ... about a fortnight's time. Ripe ... nas have a fair inquiry.

Prices (Per Case): Oranges: ... Navels 47/6, Jap. 35/-. Cal. Le... 70/-. Grapefruit, 35/-. Ban... ripe, 25/-. Pines, 18/6. Wil... Bon Chretien Pears, 6/- to 8/-. Ap... Grav., 9/- to 12/-; Worcesters, 5... 8/-; cookers, 4/6 to 6/6. N.Z. Le... 18/- to 21/-; small sizes, 10/-.

SPECIAL NOTICE TO FRUITGROWERS

All Members under Fidelity Bond

In response to numerous requests from growers for information as to who are members of the

Wholesale Fruit Merchants' Association of Victoria

the following list is given. All are members of the above Association, and are registered firms carrying on business in the

WHOLESALE FRUIT MARKET, MELBOURNE.

STAND NUMBERS ARE AS INDICATED IN PARENTHESES.

T. STOTT & SONS (26).
H. L. E. LOVETT & CO. (23).
A. E. PITT (14).
J. DAVIS PTY. LTD. (8).
W. S. TONG (31).
SILK BROS. PTY. LTD. (24-25).
J. G. MUMFORD (35).
GOLDEN VALLEY FRUIT CO. PTY. LTD. (15).
J. W. ROSS (13).
H. M. WADE & CO. (21).
DAVID SMITH PTY. LTD. (3).
SILBERT, SHARP & DAVIES PTY. LTD. (17)
W. A. WATKINS (5).
P. A. PATRIKEOS (36).
G. WOOLF & SONS (29-30).
R. CORNISH & SONS (5).
J. HYMAN & SON (51).
HERBERT WILSON PTY. LTD. (10).
FRANK BOOTH & SONS PTY. LTD. (16).
GEO. LISTER PTY. LTD. (12).
TIM YOUNG & CO. PTY. LTD. (18).
F. W. VEAR PTY. LTD. (28).
YEE HOP LOONG & CO. (32).
H. LOUEY PANG & CO. PTY. LTD. (4).
WING YOUNG & CO. (38).

Correspondence is invited by the Association.

Office : 21 Wholesale Fruit Market, Queen Street, Melbourne. Phone F 4866.

RIDLEY & HOULDI...

Covent Garden Market, LON...

Specialists in Australian Fruit.
Solicit consignments of Apples, Pears, Etc.

Our record of over 30 years' standi... in the handling of Australian fruit, ... satisfactory results, is a recommend... for growers to ship their fruit to our house.

REPRESENTATIVES—
International Fruit & Mercantile ... pany Ltd., Melb., Vic., Aust...; Pitts & Lehman, 129 Pitt St., Sy...ey, N.S.W.; and A. J. Walshe & ... Hobart, Tasmania.

Ship Your Oranges, Lemons, Grapes to New Zealand

All consignments for this market will have careful attention and realise highest prices if sent to

The Co-operative Fruitgrowers of Otago Limited, Dunedin

PERSONAL SUPERVISION OF EVERY CONSIGNMENT.

Cheques posted promptly.

Drop us a Line or Cable: "Peachbloom," Dunedin.

AMONG THE RETAILERS

The Soft Fruit Season — Combined Traders' Council

RESUME OF THE SOFT FRUIT SEASON.

By Chas. Mawdsley, Treasurer, Melb. and Metrop. Retail Fruiterers' Association.

THE SOFT FRUIT SEASON is now rapidly drawing to a close, but I am afraid that it will not be looked back upon with very much satisfaction by the average retail fruiterer. Adverse climatic conditions have greatly affected the sale of fruits and salads, and coupled with the menace of the brown rot in all stone fruits, it has been a very poor season from a retailer's point of view.

Not only has the retailer been affected, but I am certain that it has affected the fruit grower and market gardener; commodities such as Lettuce and Cucumbers, have been selling this season at ridiculously low rates, whereas in a normal season they are eagerly sought after and usually return to the grower better compensation for his labors.

There has been of late a marked improvement in the way most goods have been and are still being marketed, and although there is still room for improvement in this direction, the retailers are fully aware of the difficulties which confront the growers with regard to labor, it is very hard at times to secure the right type of help in the picking and packing, particularly of soft fruits. As retailers, we fully appreciate the efforts of the growers to continue making improvements.

As I write this article my mind wanders back over a number of years to the names of a few growers whose produce was eagerly sought after, and they did not experience much difficulty in selling out; unfortunately quite a lot of these men do not now attend the market, but I am pleased to see that in many instances the sons are carrying on in the footsteps of their fathers. I may just incidentally mention here that I have bought Peaches off one family of growers for over 20 years and the reason is not far to seek. I have always got an honest case of fruit from them. I feel quite certain that if the growers would eliminate a little of the inferior fruit from the cases when packing the results would be better for themselves and for the whole of the trade in general. Remember the "Honest Case of Fruit," and a better reward for your labor.

Each and every one of the users of the Victoria Market are being brought into constant touch with each other through the medium of the Victoria Market Traders' Council; a recent meeting of this Council was held on Thursday, January 28, at the Temperance Hall, Melbourne. Several very important questions affecting the users of the market were brought forward for discussion. and some of which will have beneficial results to all in the near future. This Council should interest all growers, so please send your delegates along armed with any proposal that you think will be of benefit and any grievance you think you have, and let it be thrashed out and, if possible, removed.

I should like at this juncture to remind all growers, but particularly country growers, that the Melb. and Metropolitan Retail Fruiterers' picnic will be held this year on March 10 (Wednesday). Please note: there will be no markets or fruit shops open on that day.

The parking space, or lack of it, in the vicinity of the Victoria Market is still causing grave concern to all who use the market. We are keeping the matter in mind and with the help of the City Traffic Inspector, the Wholesale Fruit Merchants and others we hope to get some relief in the future. This is a vital question and one which will have to definitely be solved sooner or later. The congestion is getting positively dangerous, and particularly in the streets near the market, along which the trams run. I would like to thank the Editor of the "Fruit World," for his wholehearted co-operation in linking up the trade per medium of this monthly journal, a paper I am sure which should interest everyone in the trade.

VICTORIA MARKET COMBINED TRADERS' COUNCIL.

A meeting of the above Council was held in the Temperance Hall, Russell-street, on Thursday, January 28, the President, Mr. H. Kruse, being in the chair.

The following organisations were represented:—Wholesale Fruit Merchants (Mr. H. M. Wade); Retail Fruiterers (Messrs. H. Kruse and C. Mawdsley); Market Gardeners (Mr. T. R. Marriott; United Berry Growers (Mr. W. S. Jeeves); Fruitgrowers (Mr. F. Beet); Advisory Committee (Cr. C. C. A. George and E. W. Thompson).

Apologies were received from Mr. H. Wilson, Mr. Webb, Mr. B. W. Noonan and Mr. J. W. Aspinall, for non-attendance.

Mr. Wade and the Secretary gave a report of the deputation to Mr. O'Toole, By-laws Officer of the City Council, in reference to an improvement in the **parking conditions** in the vicinity of the market for retailers' vehicles; they stated that that officer was much concerned as the chaos stated to exist there, and that he had promised to make a personal inspection of the locality and do whatever he could to improve the position.

Since then Mr. O'Toole has visited the market and made many recommendations to the Council which, if given effect to, will undoubtedly give good results for all concerned.

The Secretary reported he had made complaints as directed about certain growers selling before the proper hour, and the matter was to be attended to.

"Dealers" in the Market.

There was some discussion in reference to the number of dealers operating in the market, amongst the growers' section, these dealers very often selling from growers' stands and not even paying market fees. This was stated to be very embarrassing at times to growers, and also to retailers. **The suggestion was made that all dealers should be segregated to come other part of the market,** possibly over to the other side of Queen-street, and it was decided that the delegates bring the matter before their respective Associations with a view of arriving at some definite proposal to place before the Markets Committee.

Complaints were made that the roadways in the market were frequently blocked for indefinite periods in the morning, which greatly hindered growers from getting into their proper stands, and it was decided that the matter should be discussed by the various organisations with the object of united action to combat the evil. Mr. Beet stated that his Association had various proposals under consideration with the object of trying to overcome the oft-recurring arguments about the responsibility of growers whilst holding goods which they have sold, but have not been taken delivery of by the buyers; a recent decision in the Court in reference to a similar case having caused much concern to all persons doing business at the market.

Mr. Wade referred to the market quotations in one of the daily papers stating they were not as correct as could be desired, and after various delegates had spoken it was resolved that consideration be given to the matter by the various Associations with a view to have accurate quotations published.

The President, in closing the meeting, thanked the delegates for their attendance.—Edw. W. Thompson, Secretary.

FRUITERERS' ANNUAL HOLIDAY.

The annual picnic of the retail fruiterers will be held at Queenscliff on Wednesday, March 10, and as all retail fruit shops will be closed on that day, growers are advised to refrain from sending fruit along for disposal on the day.

THE PIG PEN

HELP THE FARROWING SOW.

Early Mortality Heavy.

An alarming report was recently made by a New Zealand pig recorder, who stated that 22 per cent. mortality occurred between birth and weaning. Most deaths were described as "born dead," but if better attention was given at farrowing, the percentage would be considerably reduced, as in many cases the pigs, born alive, died from suffocation.

Some losses from premature birth are undoubtedly due to defective feeding of the pregnant sow. "Too fat at farrowing" does not arise if the sow is kept healthy and active. Underfed pregnant sows are more liable to losses than properly nourished ones.

Lack of green feed and deficiency of Vitamin A causes much of the losses reported. The vitamins required can be supplied by green lucerne, green clover, cod liver oil, whole milk, or raw liver. Other additions that will be found beneficial include a mineral mixture of ½ to 1 ounce per day in the food or as a lick. An addition recommended is charcoal 20 parts, hardwood ashes 20 parts, bone meal 10 parts, and coarse salt 5 parts in the feed.

MAKING A START IN PIG FARMING.

To make money from pigs it is necessary that the stock should be of good quality. Purebreds, or their crosses, are best. A continuity of cheap feed is necessary, most of which can be grown on the farm. Where this can be done, pig farming is a sound proposition.

When pigs are fed on separated milk, some grain is required as well, stated the N.S.W. pig expert (Mr. A. F. Gray). Grain should be fed at the rate of 1 lb. to 4 lb. a day, according to the size of the pigs. Young pigs should receive 1 lb., the allowance being increased to 4 lb. as the pigs reach the baconer stage. Grain makes better feed if it be crushed.

Lucerne provides excellent grazing, according to the expert, but pigs should be taken off the lucerne and topped off in pens for about six weeks before they are marketed.

In giving advice to a prospective pig farmer, Mr. Gray said the area of the farm depended on whether the enterprise was to be mixed farming or pig breeding alone.

For the latter 25-acres to 50-acres of reasonably good soil would be sufficient. Farms of those areas would be close to the city, but the place could be larger in districts where land is cheaper. This would also permit the growth of more feed.

Number of pigs for a start depends on what feed would be available. It can be taken as a fair average that each breeding sow would return at the absolute lowest, £10 a year. This could be increased by good management generally. Profit from pigs sold could be taken at the average of half market value. Therefore, if a pig brought 30/-, about 15/- would be profit. These figures, of course, are approximate.

FEEDING THE PIGS.

Maize in Relation to Bacon Quality.

Experiments conducted by the County of Londonderry Committee of Agriculture showed that when excessive quantities of maize are fed in the rations of fattening pigs it is almost certain to injure the quality of the bacon, reports the "Pig Breeders' Gazette" (London). Rations containing 20, 40 and 60 per cent. maize meal were fed to different groups of pigs, and it was shown that the group getting 60 per cent. and to a lesser degree the group getting 40 per cent., produced bacon that was poor in quality. Other trials in the counties of Tyrone and Fermanagh confirmed these results.

The foregoing confirms local experience. It is agreed that pigs fatten well on maize. In fact, maize is one of the richest of the cereals in carbohydrates and fat. It, however, produces a soft bacon of inferior quality, and for that reason the N.S.W. Department of Agriculture advises that maize should never constitute more than 50 per cent. of the grain ration, a more desirable figure being 35 per cent.

LICE ON PIGS.

The constant irritation of the skin caused by the presence of lice on pigs results in a serious falling off in condition. Often, owing to the scratching and rubbing, inflammatory and necrotic processes are set up. It has been stated on good authority that such infectious diseases as swine fever may be transferred by these insects.

Lice may be easily killed by the application of a 2 per cent. solution of any common coal tar disinfectant, such as lysol and cresol. Fat and kerosene (one part of kerosene to fifteen parts fat) is also effective, and good results are obtained from kerosene emulsion, made up of kerosene 2 gallons, hard soap 1 lb., and water 8 gallons, 1 gallon of this solution being added to 9 gallons of water for dipping.

Treatment must be carried out at seven-day intervals for three dippings to be effective, and the pigs must not be exposed to the sun after treatment, or scalding may result. The houses and posts where the pig has been rubbing must also be sprayed with a 5 per cent. solution of disinfectant to kill the lice which have left the pig after feeding.

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Improving Banana Varieties

DESIRABLE CHARACTERISTICS NOTED — NEW VARIETIES ARE BEING INTRODUCED — VALUABLE SPORTS FROM THE CAVENDISH VARIETY ARE UNDER OBSERVATION — IMPORTANCE OF LOCAL SEEDLINGS.

By H. Wenholz, Director of Plant Breeding, N.S.W. Department of Agriculture.

CONSIDERATION IS BEING GIVEN to the undertaking of a programme in Banana improvement by the Plant Breeding Section of the N.S.W. Department of Agriculture. It is thought that it may be possible to improve on the variety chiefly grown commercially at present in New South Wales, viz., Cavendish. Mr. Savage, Director of Fruit Culture, states that this variety is of desirable dwarf growth and hardiness, withstanding high winds well, **but it is open to improvement in the size and quality of the fruit as well as in its storage qualities.** The fingers are set almost at right angles to the stem, and are not compact. The Cavendish Banana cannot therefore be marketed in the bunch, the fruit having to be cut and cased. Another disadvantage of the Cavendish Banana is that the skin marks easily and this detracts from its appearance. **Gros Michel** is well suited to the system of marketing in the bunch, as the fingers turn back towards the stem and are very compact. Gros Michel is of superior quality to Cavendish, and the skin marks less readily, but its very tall growth exposes it to damage from wind and it is not suited to N.S.W. conditions..

The Gros Michel Banana is also very susceptible to Panama disease, which, although not occurring in N.S.W. to any extent, is prevalent in the neighbouring State, Queensland.

Bunchy top disease is, of course, the scourge most feared, but it is not known whether any variety has resistance to this disease.

Introducing New Varieties.

Advice concerning a Banana breeding programme has been sought from Professor E. E. Cheesman, Professor of Botany of the Imperial College of Tropical Agriculture, Trinidad, British West Indies, who has had a very extensive experience in Banana breeding work, and some of Professor Cheesman's new seedling varieties are being introduced.

One of these seedlings, viz., Giant Governor, is a sport from Cavendish, with fruit of the Gros Michel type, but other seedlings are derived from the Gros Michel and have been found by Professor Cheesman to be immune from Panama disease.

Our problem of improving on the Cavendish type is rendered extremely difficult by the fact that this variety does not set seed, and therefore cannot be bred from. Professor Cheesman considers that the Gros Michel seedlings he has raised are probably more resistant to wind than the Gros Michel, and he states that they have as tough a skin as this parent variety.

The first aproach to a Banana improvement programme is necessarily the collection of named sorts for the observation of varietal characters and the determination and recognition of synonyms. In co-operation with the Fruit Branch of the N.S.W. Department of Agriculture, arrangements have been made for the establishment of a variety plot on the Tweed River for this purpose.

Mr. Eastwood, Special Fruit Instructor on the North Coast of N.S.W., has located some

Sports of the Cavendish Banana, which are usually three of four feet taller than the parent variety, and which produce more compact bunches with larger individual fruits. He states that the fruit of these sports has also a tougher skin, transports better, and has a more attractive appearance than the Cavendish when ripened. These sports are gaining favour in commercial plantings in recent years.

Professor Cheesman has not only drawn attention to the scarcity of seedling types of Bananas for use in cross breeding, but also to the trouble encountered in seed setting and germination in this crop, making the raising of new seedling varieties a difficult undertaking.

Professor Cheesman doubts if all varieties of Bananas (except the wild and fully fertile species) develop seed naturally. These wild species must therefore be used in the first instance as one of the parents in crossbreeding in order to obtain seed for raising new seedling varieties.

Two seedling types have been discovered locally, and they may at least provide the basis of crossbreeding work if this is undertaken later.

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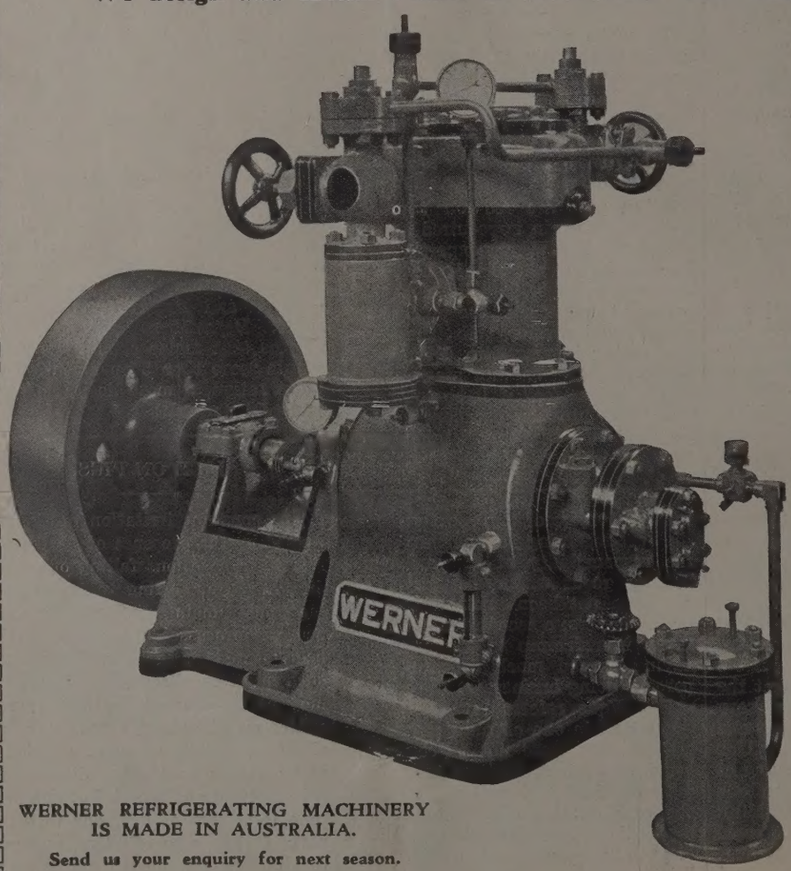

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PLUM BREEDING AND POLLINATION.

Breeding work with Japanese Plums is being continued at Hawkesbury College by Mr. Shirlow. During the year, some of the crossbred seedlings bore fruit. None have so far proved to be equal to existing varieties. writes the N.S.W. Director of Plant Breeding, Mr. H. Wenholz.

Some species of prunus allied to Japanese Plums, viz., **P. munsoniana** (Wild Goose), **P. munsoniana** (Robinson), and **P. Simonii**, have been used as parents in hybridising with the Japanese Plum varieties Shiro, Chalco, Cyca Smomo and Sultan.

Pollination tests carried on with varieties of Japanese Plums showed Chalco to be self-sterile and to be successfully pollinated by Cyca Smomo, Shipper and Santa Rosa. Sultan has proved self-sterile on the season's trial, and is successfully pollinated by Chalco.

Investigations with Prune varieties carried out at Yanco by Mr. Pogendorff again showed Robe de Sergeant to be self-sterile. In the case of D'Agen, a small percentage of fruit set when selfed in 1935, but no fruit was obtained from selfing in 1936. There appear to be several strains of both Robe de Sergeant and D'Agen. Careful selection is needed of strains flowering at the same time and having a high degree of inter-pollination.

Angelina was found to be too sterile to be considered as a commercial pollinator for either Robe de Sergeant or D'Agen.

Mr. Atkinson, working with English Plums at Bathurst, has shown that Pond's Seedling is self-sterile but cross-fertile with President, Angelina and Giant. Of these varieties, however, the first two could not be of any value as pollenisers under commercial conditions, as the blossoming periods do not usually coincide.

President again proved to be self sterile and cross-fertile with Giant, Angelina, Grand Duke and Pond's Seedling.